DOCUMENT RESUME

ED 131 986 95 RC 009 568

AUTHOR Bale, Richard L.; And Others
TITLE Family-Centered Residential Career Education and the Rural Poor: A National Needs Assessment. Volume I: The Nature and Size of the Potential Client Population. Evaluation of the Mountain-Plains Education & Economic Development Program, Inc.
INSTITUTION Abt Associates, Inc. Cambridge, Mass.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C. Education and Work Group.
REPORT NO AAI-75-172
PUB DATE 8 Oct 76
CONTRACT NIE-C-74-0147
NOTE 83p.

EDRS PRICE MF-$0.83 HC-$4.67 Plus Postage.
DESCRIPTORS Academic Achievement; *Career Education; Comparative Analysis; *Economically Disadvantaged; Employment; Family (Sociological Unit); Housing; Income; Labor Force; *National Norms; *Needs Assessment; Program Descriptions; Racial Differences; Residential Programs; *Rural Population; *Socioeconomic Status
IDENTIFIERS *Mountain Plains Program

ABSTRACT

Employing 6 eligibility criteria (a family unit, income less than 1.5 times the official poverty level, rural residence, and head of family physically able to work and between 18 and 49 years having completed sixth grade), an assessment was made of the size and characteristics of the potential client population for family-based, residential career education programs similar to the Mountain-Plains Career Education Program at Glasgow Air Force Base in Montana. Eligible families were then compared with national family averages in terms of ethnic composition, education level, family status, housing, employment, and income. Some major findings were: 2.3 million families were eligible; public assistance accounted for only 2% of the eligible family's total income; the eligible heads of families were fairly similar to those of the nation in ethnicity, though 5% more of the eligibles were black; less than 13% of the eligibles had completed any education beyond high school as compared to 24% in the nation; over 1 eligible family in 5 was headed by a female, and eligible families were larger than the national average by 1 person; over 38% of the eligible families paid more than 33% of their total income in rent; eligible families had nearly 2 persons more per dwelling than the national average; the national average family income was $11,000 as compared to $3,100 for eligibles; 13% of the eligibles were not in the labor force vs 18% of all family heads. (JC)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

Family-Centered Residential Career Education and the Rural Poor: A National Needs Assessment

Volume I: The Nature and Size of the Potential Client Population

ED 13 0

RC009568

Evaluation of the
Mountain-Plains Education & Economic Development Program, Inc.

Developed by:

Abt Associates Inc.
55 Wheeler Street
Cambridge, MA 02138

Richard L. Bale
Project Director

Prepared for:

Education and Work
National Institute of Education
Department of Health, Education and Welfare

October 1976

2

ABT ASSOCIATES INC.
55 WHEELER STREET, CAMBRIDGE, MASSACHUSETTS 02138
TELEPHONE • AREA 617-492-7100

Report No. AAI-75-172

Contract No. NIE-C-74-~~1047~~ 0147

FAMILY-CENTERED RESIDENTIAL CAREER EDUCATION AND THE RURAL POOR: A NATIONAL NEEDS ASSESSMENT

Volume I: The Nature and Size of the Potential Client Population

8 October 1976

Principal Authors:

Richard L. Bale
Donna R. Park
Robert W. McMeekin, Jr.

Prepared For:

THE NATIONAL INSTITUTE OF EDUCATION
Education & Work
Washington, D.C. 20208

Contract Manager	Quality Control Reviewer	Management Reviewer

TABLE OF CONTENTS

		Page
SUMMARY & CONCLUSIONS		i
CHAPTER ONE:	INTRODUCTION	1
1.1	Background and Description of the Mountain-Plains Program	1
1.2	The Context of this Report: An Overview of the Abt Associates Inc. Evaluation of the Mountain-Plains Program	5
CHAPTER TWO:	DEFINING THE ELIGIBLE POPULATION	11
2.1	Defining the Potentially Eligible Population: Applying Three Basic Criteria	12
	2.1.1 The Definition of Family	12
	2.1.2 The Definition of Poverty	13
	2.1.3 The Definition of "Rurality"	16
	2.1.4 The Number of "Potentially" Eligible Families	17
2.2	Identifying the Eligible Population	19
	2.2.1 The Size of the Eligible Client Population	20
CHAPTER THREE:	CHARACTERISTICS OF THE ELIGIBLE CLIENT POPULATION ON A NATIONAL BASIS	23
3.1	Four Basic Family Profiles	23
3.2	A Note on Reading Tables 3.3-1 Through 3.6-1	26
3.3	Demographic Characteristics of Eligible Families by Four Family Profiles	27
	3.3.1 Race of Family Head	27
	3.3.2 Age of Family Head	27
	3.3.3 Education of Family Head	30
	3.3.4 Sex of Family Head	30
	3.3.5 Disability Limiting Work	31
	3.3.6 Family Size and Children Uner 18	31
3.4	Housing Conditions and Costs for Eligible Families by Four Profiles	31
	3.4.1 Housing Costs	32
	3.4.2 Adequacy of Housing Units	35

TABLE OF CONTENTS (continued)

		Page
3.5	Employment Characteristics of Heads of Eligible Families by Four Profiles.	37
	3.5.1 Employment Status of Family Head.	41
	3.5.2 Type of Employment of Family Head	42
3.6	Income Characteristics of Eligible Families and Family Heads by Four Profiles.	44
	3.6.1 Family Income	44
	3.6.2 Income of Family Head	46
CHAPTER FOUR:	THE ECONOMIC DEVELOPMENT REGIONS AND THE ELIGIBLE POPULATION	49
4.1	Demographic Characteristics of Eligible Families by Economic Development Regions.	55
	4.1.1 Ethnicity of Family Head.	55
	4.1.2 Age of Family Head.	55
	4.1.3 Education of Family Head.	58
	4.1.4 Sex of Family Head.	58
	4.1.5 Disability Limiting Work.	58
	4.1.6 Family Size and Children Under 18	58
4.2	Housing Conditions and Cost for Eligible Families by Economic Development Regions.	59
	4.2.1 Housing Costs	59
	4.2.2 Adequacy of Housing Units	62
4.3	Employment Characteristics of Heads of Eligible Families by Economic Development Regions	63
	4.3.1 Employment Status of Family Head.	63
	4.3.2 Type of Employment of Family Head	68
4.4	Income Characteristics of Eligible Families by Economic Development Regions	70
	4.4.1 Family Income	70
	4.4.2 Income of Family Head	70

LIST OF TABLES

		Page
Table 2.1.2-1:	Poverty Cutoffs: Criteria Used in Determining Poverty Status for 1970 Census. Income Figures are for 1969.	14
Table 2.1.2-2	Income Thresholds at the Poverty Level in 1974 by Sex of Head, Size of Family, and Number of Related Children Under 18 Years Old, by Farm-Nonfarm Residence	15
Table 3.1-1	Number and Percent of the Total Eligible Client Population of Families by Selected Categories of Povery Status and Family Type	25
Table 3.1-2	Number and Percent of the Total Eligible Client Population of Families in 1970 in Each of 4 Profiles of Characteristics as Defined by Selected Categories of Poverty Status and Family Type.	25
Table 3.3-1	Basic Demographic Characteristics of the Eligible Population in Each of 4 Family Profiles, for All Eligible Families, and for the Total Population of Families in the United States.	28
Table 3.4-1	Housing Conditions and Costs for Eligible Families in Each of 4 Family Profiles, for All Eligible Families, and for All Families in the United States.	33
Table 3.5-1	Employment Characteristics of Heads of Eligible Families in Each of 4 Family Profiles, for All Eligible Families, and for Heads of All Families in the United States.	38
Table 3.6-1	Income Characteristics of Eligible Families and Heads of Eligible Families in Each of 4 Family Profiles, for All Eligible Families, and for Heads of All Families in the United States.	45
Table 4.0-1	Number and Percent of the Eligible Population in Each Economic Development Region, and in the United States by Selected Categories of Poverty Status and Family Type	54

LIST OF TABLES (continued)

		Page
Table 4.1-1	Basic Demographic Characteristics of the Eligible Population of Families in Each of 8 Economic Development Regions, for All Eligible Families, and for All Families in the United States	56
Table 4.2-1	Housing Conditions and Costs for Eligible Families of 8 Economic Development Regions, for All Eligible Families, and for All Families in the United States	60
Table 4.3-1	Employment Characteristics of Heads of Eligible Families in 8 Economic Development Regions, for All Eligible Families, and for Heads of All Families in the United States..	64
Table 4.4-1	Income Characteristics of Eligible Families and Heads of Eligible Families in Each of 8 Economic Development Regions, for All Eligible Families, and for Heads of All Families in the United States.	71

LIST OF FIGURES

		Page
Figure 2.1.4-1	The Number and Percent of Families in the United States in 1970 that were Eligible by Place of Residence, by Poverty Status, and the "Potentially" Eligible Population of Families: Eligible Both by Place of Residence and by Poverty Status.	18
Figure 2.2.1-1	The Number and Percent of the Potentially Eligible Population of Families that are Eligible by Age of Family Head, Education of Family Head, Physical Ability of Family Head to Work, and the Total Eligible Client Population of the Families: The Population of Families that is Eligible by Age, Education and Physical Ability to Work of Family Head Combined.	21
Figure 3.4-1	Percent of Families in the Rent Universe in 1969 whose Gross Rent was 25% or More and 35% or More of their Total Family Inocme, by All Eligible Families, Each of 4 Family Profiles, and All Families in the United States in the Rent Universe. .	36
Figure 3.5-1	Percent of Family Heads at Work During the Reference Week for the 1970 Census Who Worked 40 Hours or More and 60 Hours or More During the Reference Week, by All Family Heads in the United States, Heads of All Eligible Families, and Each Family Profile.	43
Figure 4.0-1	Actual Geographic Boundaries of the Economic Development Regions	50
Figure 4.0-2	Approximated Georgaphic Boundaries of the Economic Development Regions	52

Summary

The Mountain-Plains Education & Economic Development Program, Inc. is a family-centered residential career education program designed to help multiproblem, disadvantaged rural families become economically and socially self-sufficient. Families are recruited from a six-state area made up of Idaho, Montana, Nebraska, North Dakota, South Dakota and Wyoming and relocated to the program Center at Glasgow AFB, Montana for approximately seven months. At the Center Mountain-Plains provides, in a residential setting, a comprehensive and integrated set of services ranging from basic education to home management, health care and parenting training; from personal, family and career counseling to specific job-skill training and employment placement assistance.

The National Institute of Education, the funding agency for Mountain-Plains during its research and development stage, commissioned an evaluation of the program by Abt Associates Inc. that will be completed by March 1977. Although the final results on the effectiveness of Mountain-Plains are not yet available, several agencies have expressed an interest in the potential demand for similar programs should Mountain-Plains be replicated in other regions of the United States.

The purpose of this report is to provide national and regional estimates of the size and characteristics of the population of families who would be eligible for participation in programs similar to Mountain-Plains. For the nation, we found that:

2.3 million families would be **eligible** for family-centered residential career education programs similar to Mountain-Plains.

11 million individuals were represented by the 2.3 million eligible families and would be directly affected by participation in career education programs similar to Mountain-Plains.

Although seriously disadvantaged in terms of having low education, living in expensive but inadequate housing and suffering from extremely low incomes, most eligible families were neither idle nor taking a free ride on the welfare roles. A lower proportion of heads of eligible families were unemployed than among heads of all families, and many worked very long hours. Public assistance and welfare payments accounted for only 2% of the typical eligible family's total income.

HOW DID WE DEFINE THE ELIGIBLE POPULATION?

To define the eligible population we used six criteria applied by Mountain-Plains to screen applicants into the program. The criteria are:

a) The unit must constitute a *family;*

b) The family must have an income less than 1½ times the official poverty level;

c) The family must live in a rural place;

d) The head of the family must be physically able to work;

e) The head of the family must be between the ages of 18 and 49; and

f) The head of the family must have sufficient education to be able to benefit from participation in a career education program similar to Mountain-Plains (for purposes of this report, completion of at least sixth grade).

At the time of the 1970 Census, there were 51.2 million families in the United States. Among these families, 20.3 million lived in rural places and 10.1 million families had income less than 1½ times the official poverty level. Nearly 5.3 million families – over 10% of all families in the nation – lived in rural places *and* were sufficiently poor to be potentially eligible for participation in a family-centered career education program similar to Mountain-Plains. Among these 5.3 million families, 92% of the family heads were physically able to work, 80% had completed at least sixth grade, and half were between the ages of 18 and 49.

By simultaneously applying all six of the above rather stringent eligibility criteria we identified a large segment of our nation's population as potential clients for family-centered career education programs similar to Mountain-Plains: 2.3 million families representing 11 million persons.

The Characteristics of Eligible Families Compared With All Families in the United States

We then described these 2.3 million eligible families and compared them with all families in the nation. In general, we found that eligible families clearly constituted a seriously disadvantaged part of our population when they are compared with all families in the nation in terms of demographic characteristics, housing conditions and costs, work and income.

HOW DID ELIGIBLE FAMILIES COMPARE WITH ALL FAMILIES IN THE NATION IN TERMS OF DEMOGRAPHIC AND HOUSING CONDITIONS?

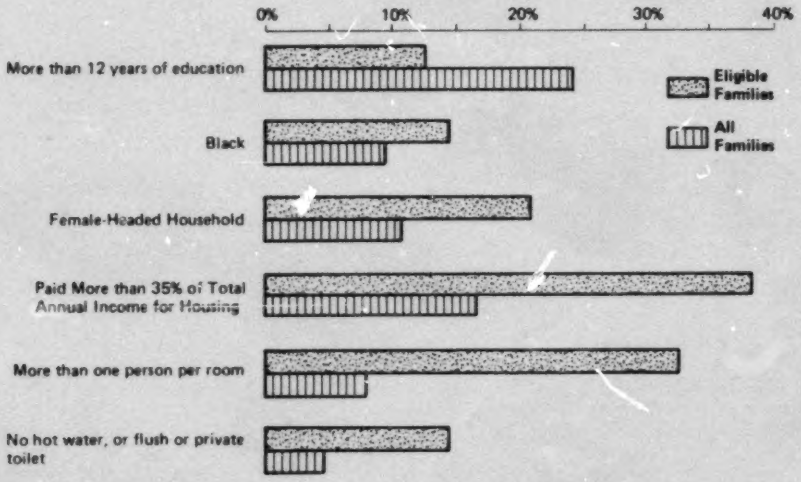
ETHNIC COMPOSITION: Eligible families were fairly similar to all families in the nation in terms of ethnic composition. About 1% of the family heads in each group were of American Indian or "other" ethnic background and about 4% of both groups were of Spanish descent. Among the eligible group, however, about 5% more of the families were black than among all families (14.4% compared with 9.5%).

EDUCATION: The proportions of the heads of all families and heads of eligible families who had completed less than a high school education were quite comparable at about 40% each. However, families suffered from less advanced educational attainment than the rest of the population. Less than 13% of the heads of eligible families had completed any schooling beyond high school, whereas over 24% of all family heads in the nation had completed more than 12 years of education.

FAMILY STATUS: Over one eligible family in 5 was headed by a female, which means a mother with children but no husband in the household to help out. This burdensome situation existed less than half as often among all families. In addition, eligible families were *larger* than the national average by one person per family. However, since eligible families had an average of only half a child more than among all families the larger size of eligible families indicates the presence of more, probably elderly, members of the extended family than was typical in the rest of the population.

HOUSING: In terms of housing conditions and costs eligible families were substantially worse off than the typical family. Over 38% of eligible families paid more than one-third of their total family income for rent – over twice the proportion among all families. Eligible families also lived in more crowded housing than the rest of the nation. In 1969 only 8% of all housing units in the nation were occupied by an average of more than one person per room. Over 32% of eligible families lived in housing with more than one person per room, and eligible famililies typically had nearly *two persons more* per dwelling unit than the national average. In addition, 15% of all eligible families lived in housing *lacking* one or more of the following basic facilities that commonly define adequate housing: complete private kitchen facilities, piped hot water, private flush toilet, or private bathtub or shower.

Figure 1
Comparisons of Eligible Families with All Families in the United States on Demographic and Housing Characteristics

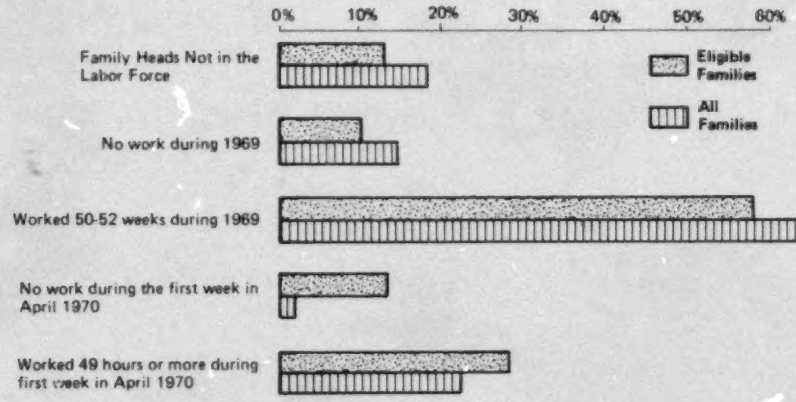


HOW DID THE EMPLOYMENT CHARACTERISTICS OF HEADS OF ELIGIBLE FAMILIES COMPARE WITH THOSE OF ALL FAMILY HEADS?

Contrary to prevailing stereotypes that depict the poor as lazy and unwilling to work we found that the heads of eligible families apparently worked when they could, and worked long hours at that. They did, however, suffer from substantial unemployment and underemployment.

For example, among all families in the nation 18% of the family heads were not in the labor force, compared to less than 13% of the heads of eligible families. Over 83% of the heads of eligible families were employed, compared to 80% of all family heads. In addition, over 14% of all family heads had not worked at all during 1969, while slightly less than 10% of eligible family heads had not worked during that year. On the other hand, nearly 65% of the heads of all families had worked between 50 and 52 weeks during 1969, while only 58% of the heads of eligible families worked that many weeks during the year. The problem eligible families had with sporadic employment is highlighted by the fact that about 13% of employed eligible heads had no work during the first week in April 1970, compared to only 2% among the employed heads of all families. This does not, however, mean that eligible heads were not willing to work. Among family heads who were at work during the first week in April 1970, over 27% of heads of eligible families worked 49 hours or more (17% worked 60 hours or more), while only 22% of the heads of all families worked more than 49 hours that week.

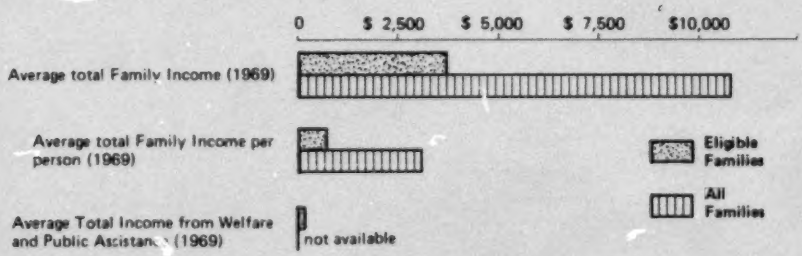
Figure 2
Comparisons of Eligible Families with All Families in the United States on Basic Employment Characteristics



HOW DID THE INCOME CHARACTERISTICS OF ELIGIBLE FAMILIES COMPARE WITH THOSE OF ALL FAMILIES IN THE UNITED STATES?

In 1969 the average total family income for all families in the United States was approximately $11,000. For eligible families, the average total family income was only $3,100, while it was only $800 for eligible families. The employment earnings of heads of eligible families averaged 80% of their total family income from all sources, compared to only 69% among all families in the United States. On the average heads of eligible families received a total of only $87 from public assistance and welfare for the entire year of 1969, about 2% of their total family income from all sources.

Figure 3
Comparisons of the Eligible Families with All Families in the United States on Basic Income Characteristics



[1]This report is based on an analysis of information in the 1970 Census, both published documents and the 1% state-based Public Use Sample.

[2]Limited copies of the full report are available from the National Institute of Education, Education and Work Group, 1200 19th Street, N.W., Washington, D.C. 20208.

[3]This report is one of a series of interrelated reports being prepared by Abt Associates Inc. as part of its evaluation of the Mountain-Plains Program. Other reports will become available by March 1977. The Project Director, Dr. Richard L. Bale, may be contacted at Abt Associates Inc., 55 Wheeler Street, Cambridge, MA 02138 (617/492-7100).

CHAPTER ONE
INTRODUCTION

1.1 Background and Description of the Mountain-Plains Program

The Mountain-Plains Career Education Program is operated by the Mountain-Plains Education & Economic Development Program, Inc., a non-profit corporation chartered in Montana. The Program is located as a tenant organization on Glasgow Air Force Base near Glasgow, Montana. Mountain-Plains as a corporation serves the educational and closely related socio-economic needs of residents from the essentially rural regions of the states of Idaho, Montana, Nebraska, North Dakota, South Dakota and Wyoming. The Mountain-Plains Program was originally designated by the U.S. Office of Education to implement the family-based residential career education model and currently is operated under funding from the National Institute of Education.

In a broad sense, the Mountain-Plains Program has goals in four major areas:

- Development: to design, implement, and develop the Model.
- Research: to perform research and evaluation of the effects of the Model.
- Products: to provide guides, methods and procedures, research reports, cost analyses, and curricula to permit replication of the Model.
- People: to provide career education to a significant number of the rural disadvantaged with the aim of improving their quality of life.

The Mountain-Plains Program serves at any one time approximately 200 families in residence at its site on Glasgow Air Force Base. Families remain in residence at Glasgow Air Force Base for an average of eight to nine months. Programs and services provided by Mountain-Plains include:

- A Career Development Program for the head-of-household and optionally for the spouse, including Foundation Education in math skills and communication skills, Occupational Preparation, and Work Experience.
- Career Guidance, required for both adults.
- Family and individual counseling for head-of-household and spouse and, based on need, for older children.
- A Family Core Curriculum designed to provide both head-of-household and spouse with home management, health, consumer education, parenting, community organization and recreation skills.
- Limited basic medical, dental, and optical services through contracted services.
- Financial support of the family while in the Program.
- Child development and care for preschool-age youngsters.
- Job placement assistance after exit from the Program.
- Supportive follow-on services after placement.

The Occupational Preparation Program stresses mastery of identified essential competencies for entry level positions in the career areas of Building Trades and Services; Mobility and Transportation; Tourism and Marketing; and Office Education. There are a total of approximately fifty individual careers within the clusters identified above for which occupational preparation is available.

In each of its required areas, the Mountain-Plains Program provides individualized diagnostic and prescriptive mechanisms for determining sequences of instruction for each student. Plans prepared for each student recognize already existing skill levels as noted by pretests. Student progress is then monitored on a continuing basis with formal review every six weeks or, based on need, at interim points. Completion of the Mountain-Plains Program is defined as validation in all required program areas by both adults, including the requirement for validation in an occupational skill for the head-of-household. Validation is based upon the achievement of competency or performance objectives as determined by posttests.

The target population of the Mountain-Plains Program includes residents of the essentially rural areas within the six States which the Program serves. Families of two or more members with at least one adult

are eligible. Selection of student families is accomplished through the application of a number of selection criteria. These criteria are fundamentally exclusive rather than inclusive. They reflect the requirement that the family be unemployed or underemployed with no present marketable skills, and that its members possess certain personal characteristics (among the most important being age, education and ability to work) which will enable them to negotiate, and benefit from, all aspects of the Program.

Mountain-Plains student families are recruited through six field offices, located in the capital cities of the six States the Program serves. Staff in these offices are charged with recruitment, placement and follow-on support, pre-Center data collection, and liaison with state and local agencies. In recruiting, staff draw upon a variety of sources for referrals such as state and private agencies, civic and church groups, Indian groups, and listings of families who have received economic or social rehabilitation services in the past. In addition, families may themselves apply for admission to the program through the State offices.

The recruitment and screening process yields a pool of families that have expressed a desire to enter the program and are defined as eligible for participaiton in the Mountain-Plains Program. As an important aspect of the research design for assessing program impacts, approximately one-sixth of the pool of families eligible for participation in the Program is assigned to a comparison group. Members of the comparison group do not enter the Program and their experiences provide a baseline against which the experiences of the families who enter the Program may be compared.

Participant families arrive weekly at the Center on Glasgow Air Force Base and exit when they achieve validation in their program.[1] The Mountain-Plains Program is able to accomplish this weekly open entry/open exit approach through individualized curricula. Family and student

[1]Not all families who enter the program (participants) complete their program. This gives rise to two subgroups of participants -- "completers," who achieve certification and complete their programs, and "resignees," who leave before they complete their program.

participation, and eventual program completion, occurs in accord with individual plans for student families based on their present status, assessed needs, and goals. The curricula developed by Mountain-Plains are entirely individualized, allowing each student in an instructional area to be at a different point in his or her program.

Each head-of-household is expected to participate a minimum of 35 hours per week in the formal program. Spouses must participate at least 30 hours per week until such time as a minimum program required of both adults, the Family Core Curriculum, is completed. Both must also complete Counseling, requiring from eight to twenty-two weekly group and individual sessions. Study in one of the occupational preparation areas, plus supporting basic or foundation education, is required for the head-of-household and is optional for the spouse.

The first week on-Center at Glasgow Air Force Base is devoted to an orientation of the new student families. After orientation, all adult students enter the phase of the program entitled "Family Core Curriculum." The length of time each student spends in this phase of the program varies with the individual; the average period is about four weeks.

During this phase the student participates in Health Education, Home Management, Consumer Education, Parent Involvement and Career Guidance programs as well as initiating Counseling. Career Guidance helps both adults to become aware of and to explore the universe of career opportunities as well as their own aptitudes and interests before beginning a specific program. By the end of the Family Core Curriculum, an individual career development plan based upon measured needs and personal goals has been developed for each head-of-household and interested spouse. The individual then undertakes Occupational Preparation and, where required, Foundation Education as well as continuing Counseling. Foundation Education consists of Math Skills and Communication Skills, including reading, grammar, spelling and punctuation. The levels of Foundation Education required are determined by the career choice the student makes. At the end of his or her program, the student must complete Work Experience with an actual employer.

Placement procedures are initiated three months prior to the predicted completion date of a student family. At this time a notification is forwarded to the state(s) indicated by the student as choice of residence. State staff rely upon student information, employer contacts, state employment agencies, and knowledge of state conditions to identify the areas of job likelihood for a particular head-of-household and spouse, should the spouse also desire employment.

Contact between State and Center continues through the last three months a family is in the Program. At the time of program completion, and if openings in the requested geographic area have been identified, the completing student(s) may travel from Glasgow Air Force Base to the area for interviews. Resumes, recommendations, and final transcripts are made available to potential employers at this time. If suitable employment should be temporarily unavailable, the family moves to the city or geographic area of their choice, where placement efforts continue.

Mountain-Plains has the responsibility for support and follow-on services conducted by the state office personnel on at least a quarterly basis. These follow-on services are intended to resolve problems that may arise in the adjustment of the student family to its new community and new employment situation.

1.2 The Context of this Report: An Overview of the Abt Associates Inc. Evaluation of the Mountain-Plains Program

In July 1974 Abt Associates Inc. was commissioned by the National Institute of Education to conduct an evaluation of the Mountain-Plains Program. Abt Associates' evaluation of the Mountain-Plains Program consists of three discrete but highly interrelated studies: (1) the Follow-Up Study; (2) The Survey of Similar Programs, and (3) The National Needs Assessment.

1) The Follow-Up Study[2]

The Follow-Up Study will directly assess the success of Mountain-Plains in the fourth major goal area of the Program mentioned earlier -- program impact in terms of enhancing the "quality of life" of participants. This is the primary area of research, testing the most basic hypotheses about the effectiveness of the Program.

To accomplish this assessment of Mountain-Plains' effectiveness, information will be gathered from participant and comparison group families at several points in time: prior to exposure to the Program; at exit from the Program; and at six-month intervals after exit from the Program (up to 24 months post-exit). Comparisons between participant and control group families will indicate, in terms of multiple outcome indicators, whether there are significant differences between the two groups that can be attributed to participation in the Mountain-Plains Program.

An important aspect of the investigation of Program effectiveness will be analyses of differences in outcomes among various categories of participants. If some groups of participants (e.g., those with different education levels, background characteristics, etc.) experience stronger impacts than others, the Follow-Up Study will be concerned with determining which groups benefitted most, and estimating the amount of differences among groups. The degree of program impact, if any, upon resignees will also be investigated.

An examination will also be made of the interrelations among the various aspects of quality of life and the total impact of the Mountain-Plains Program on the over-all well-being of the families and individuals who participate in the Program. The investigation of the over-all effects of the Program and the interrelationships among these effects (various domains of quality of life) is extremely important since the Mountain-

[2]See, Study Plan for the Follow-Up Study: Evaluation of the Mountain-Plains Education & Economic Development Program, Inc. (Report No. AAI-74-130) and Analysis Plan for the Follow-Up Study: Evaluation of the Mountain-Plains Education & Economic Development Program, Inc. (Report No. AAI-75-20), June 2, 1975. Requests should be directed to Richard L. Bale, Project Director, Abt Associates Inc., 55 Wheeler Street, Cambridge, Mass. 02138.

Plains career education model is designed to deal with multiple problems in a comprehensive fashion. In general, the Follow-Up Study will ask: Does the Mountain-Plains Program work? For whom does it work? Do effects survive over time? Are program effects interrelated, and if so, how?

2) The Survey of Similar Programs[3]

The Survey of Similar Programs will provide comparative and descriptive information on the nature, cost and success (in terms of increased income for participants) of four other comprehensive, family-oriented, residential programs similar to Mountain-Plains that have been implemented elsewhere in the country. Some major questions to be addressed are: What is the nature of the programs? How are they similar to and how do they differ from Mountain-Plains? What target groups do they serve? What economic impacts do they achieve? What are the costs of other programs using the residential, comprehensive family rehabilitation concept?

The primary purpose of the Survey of Similar Programs is to provide a broad narrative context within which to view the research findings concerning the Mountain-Plains Program.

3) The National Needs Assessment

An important and often overlooked task in the evaluation of social programs is to determine, on a nation-wide and/or regional basis: (a) the size and characteristics of the potential client populations; and (b) the extent to which the existing target population potentially could benefit from the services provided by similar programs. The purpose of this report is to address point (a) above:

> "To portray in terms of size and characteristics, on a national and regional basis, the potential client population for family-based residential career education programs similar in concept to Montain-Plains.

---

[3]See, Study Plan for the Survey of Similar Programs: Evaluation of the Mountain-Plains Education & Economic Development Progam, Inc. (Report No. AAI-74-132). Requests for this document should be directed to Richard L. Bale, Project Director, Abt Associates Inc., 55 Wheeler Street, Cambridge, Mass. 02138.

The second aspect of the National Needs Assessment -- the extent to which the potential client population could be expected to benefit from participation in comparable career education programs -- depends upon an extrapolation of the effects of the Mountain-Plains Program on participants with various profiles of characteristics to families with similar characteristics in the potential client population. This task requires complete data on the effects of the Mountain-Plains Program from the Follow-Up Study and will be addressed in the Abt Associates Final Report on its evaluation of the Mountain-Plains Program.

* * NOTE TO THE READER * *

While reading the portrayal of the potential client population presented in the remainder of this report, the reader should keep in mind that the data presented were derived from the state-based 1/100 Public Use Sample of Basic Records from the 1970 Census.[4] This has two primary implications:

- The data presented are estimates of the population and, as such, are subject to sampling error.
- The data were current at the time the 1970 Census was conducted. Given the state of the economy in the nation over the past two or three years, the portrayal presented below probably understates the size and conditions of the potential client population to a considerable degree.

[4]For a description and technical documentation of the State-based Public Use Sample see, U.S. Bureau of the Census, Public Use Samples of Basic Records from the 1970 Census: Description and Technical Documentation, Washington, D.C., 1972. This publication will be referred to as Documentation throughout this report.

CHAPTER TWO
DEFINING THE ELIGIBLE POPULATION

In counting the number of families in the nation and its various regions who would be eligible for participation in a family-based residential career education program such as Mountain-Plains we employ the same criteria applied by Mountain-Plains to determine eligibility for entrance into the program. The policy implications of using the same eligibility criteria employed by Mountain-Plains are quite straightforward. We assume that the eligibility criteria applied by Mountain-Plains have been developed to help identify those families who reasonably can be expected to derive significant benefits from participation in the program. Should the application to the national population of the Mountain-Plains eligibility criteria be so restrictive that only a small number of families could be expected to benefit from participation in such a program, there would be little reason to consider replicating the Mountain-Plains model elsewhere in the nation.

The 1970 Census provides a data base sufficient in scope to allow us to identify, count and describe the families in the United States who meet the primary eligibility criteria applied by Mountain-Plains. To accomplish this quantification and characterization of the eligible population we have used the State Public Use Sample of Basic Records from the 1970 Census,[5] which provides a 1/100 sample of households in the United States.

The use of Census data has caused some difficulties in operationaly defining the eligibility criteria applied by Mountain-Plains because the Census data categories and the Mountain-Plains eligibility criteria do not always correspond precisely. These differences, and the compromises they necessitated, are discussed as they arise in the course of defining key concepts in the following sections.

---

[5] See Documentation.

2.10 blank

2.1 Defining the Potentially Eligible Population: Applying Three Basic Criteria

The three basic eligibility criteria applied by Mountain-Plains are drawn from the mandate of the program -- that is shall address the needs of rural poor families. At a minimum, then, to be eligible means being (1) a family; (2) poor; and (3) resident in a rural area. The definition of these terms is not universally agreed upon. Before proceeding, therefore, we turn to the definitions of these terms as they are used in this report.

2.1.1 The Definition of Family

The Census defines a family[6] as two or more persons living in the same household who are related by blood, marriage, or adoption. This also means that all persons related to each other and living in the same household are regarded as one family. A family is considered to be a "primary" family if the head of the family is also the head of the household. The primary family (which is the definition of family used in this report) may contain a subfamily -- for example, the son and daughter-in-law of the primary family head.

While it does not correspond perfectly to the "nuclear" family consisting of two spouses and their children who typically enter the Mountain-Plains Program, this definition of a "family" is the best approximation available from the Census data. If there is a bias introduced into the estimates of the number of eligible families because of this definition of "family," it is on the conservative side (i.e., the estimates are low rather than high). The conservatism is due to the fact that in the Census data any given primary family may contain one or more subfamilies, who in themselves could be eligible. Members of subfamilies are, however, included in the total number of individuals defined as eligible.

The 1970 Census indicates that there were 51,168,599 primary families in the United States at the time of the 1970 Census.

---

[6] See Documentation, Concept 81, page 149.

2.1.2 The Definition of Poverty

Poverty is an elusive concept. It has a tendency to be relative, varying among observers and in different contexts. It is also difficult to measure objectively, because, although incomes might be equal among families, essential expenditures may vary widely for multiple reasons (family size, debt or other obligations, unusual medical or other expenditures, etc.). Despite these difficulties, attempts have been made to develop objective indicators of poverty. The most widely-used criterion of poverty was developed by M. Orshansky of the Social Security Administration and was adopted by a Federal inter-agency coordinating committee in 1969 as a consistent yardstick for determining eligibility for a number of Federal anti-poverty programs. The poverty index, as described in Census documentation:

> . . .takes into account such factors as family size, number of children, and farm versus nonfarm residence, as well as the amount of money income. The poverty level is based on an 'economy' food plan designed by the Department of Agriculture for 'emergency or temporary use when funds are low.' The definition assumes that a family is classified as poor if its total money income amounts to less than approximately three times the cost of the 'economy' food plan. These cutoff levels are updated every year to reflect changes in the Consumer Price Index.[7]

Census variables indicate whether a family's income is above or below the poverty cutoff level and how much above or below (expressed as, for example, between 1.0 and 1.25 times the poverty level). Table 2.1.2-1 on the following page presents the criteria used by Census in determining poverty status for the 1970 Census data.

The Mountain-Plains Program does not use a specific income criterion for eligibility. Its comprehensive services are designed to

---

[7] Documentation, page 156, Concept 105. See also M. Orshansky, "Counting the Poor: Another Look at the Poverty Profile," Social Security Bulletin, Vol. 28, January 1965; "Who's Who Among the Poor: Another Look at the Poverty Profile," Social Security Bulletin, Vol. 28, 1965; "Recounting the Poor: A Five Year Review," Social Security Bulletin, April, 1966.

Table 2.1.2-1[a]

POVERTY CUTOFFS: Criteria Used in Determining Poverty Status for 1970 Census.
Income Figures are for 1969.

Family Size	Number of Related Children Under 18 Years Old						
	None	1	2	3	4	5	6 or more
Male Head	**Nonfarm**						
1. Under 65 years old	$1,975	–	–	–	–	–	–
65 years old and over	1,774	–	–	–	–	–	–
2. Under 65 years old	2,469	$2,766	–	–	–	–	–
65 years old and over	2,216	2,766	–	–	–	–	–
3	2,875	2,963	$3,137	–	–	–	–
4	3,790	3,847	3,715	$3,902			
5	4,574	4,630	4,481	4,368	$4,462	–	–
6	5,247	5,265	5,153	5,041	4,891	$4,967	–
7 or more	6,609	6,665	6,535	6,422	6,274	6,049	$5,994
Male Head	**Farm**						
1. Under 65 years old	$1,679	–	–	–	–	–	–
65 years old and over	1,503	–	–	–	–	–	–
2. Under 65 years old	2,099	$2,351	–	–	–	–	–
65 years old and over	1,834	2,351	–	–	–	–	–
3	2,444	2,523	$2,666	–	–	–	–
4	3,222	3,270	3,158	$3,317	–	–	–
5	3,888	3,936	3,809	3,713	$3,793	–	–
6	4,460	4,475	4,380	4,285	4,157	$4,222	–
7 or more	5,618	5,665	5,555	5,459	5,333	5,142	$5,095
Female Head	**Nonfarm**						
1. Under 65 years old	$1,826	–	–	–	–	–	–
65 years old and over	1,752	–	–	–	–	–	–
2. Under 65 years old	2,232	$2,491	–	–	–	–	–
65 years old and over	2,190	2,491	–	–	–	–	–
3	2,781	2,651	$2,931	–	–	–	–
4	3,641	3,771	3,753	$3,715	–	–	–
5	4,368	4,500	4,481	4,444	$4,294	–	–
6	5,096	5,191	5,153	5,115	4,948	$4,798	–
7 or more	6,403	6,497	6,478	6,422	6,255	6,124	$5,825
Female Head	**Farm**						
1. Under 65 years old	$1,552	–	–	–	–	–	–
65 years old and over	1,489	–	–	–	–	–	–
2. Under 65 years old	1,940	$2,117	–	–	–	–	–
65 years old and over	1,862	2,117	–	–	–	–	–
3	2,364	2,253	$2,491	–	–	–	–
4	3,095	3,205	3,190	$3,158	–	–	–
5	3,713	3,825	3,809	3,777	$3,650	–	–
6	4,332	4,412	4,380	4,348	4,206	$4,078	–
7 or more	5,443	5,522	5,506	5,459	5,317	5,205	$4,951

[a] Reproduced from *Documentation*, page 122.

Table 2.1.2-2[a]

Income Thresholds at the Low-Income Level in 1973 by Sex of Head, Size of Family, and Number of Related Children Under 18 Years Old, by Farm-Nonfarm Residence

Size of Family Unit	Number of Related Children Under 18 Years Old						
	None	1	2	3	4	5	6 or more
Male Head	**Nonfarm**						
1 Person (unrelated indiv.):							
Under 65 years	$2,396	–	–	–	–	–	–
65 years and over	2,153	–	–	–	–	–	–
2 Persons:							
Head under 65 years	2,996	$3,356	–	–	–	–	–
Head 65 years and over	2,690	3,356	–	–	–	–	–
3 Persons	3,444	3,601	$3,806	–	–	–	–
4 Persons	4,338	4,666	4,505	$4,733	–	–	–
5 Persons	5,549	5,616	5,436	5,299	$5,413	–	–
6 Persons	6,365	6,386	6,251	6,115	5,934	$6,025	–
7 or more persons	8,016	8,085	7,926	7,790	7,610	7,337	$7,270
Female Head							
1 Person (unrelated indiv.):							
Under 65 years	$2,217	–	–	–	–	–	–
65 years and over	2,125	–	–	–	–	–	–
2 Persons:							
Head under 65 years	2,768	$3,022	–	–	–	–	–
Head 65 years and over	2,656	3,022	–	–	–	–	–
3 Persons	3,375	3,215	$3,556	–	–	–	–
4 Persons	4,415	4,574	4,553	$4,505	–	–	–
5 Persons	5,299	5,459	5,436	5,391	$5,209	–	–
6 Persons	6,183	6,296	6,251	6,205	6,002	$5,819	–
7 or more persons	7,767	7,881	7,858	7,790	7,587	7,429	$7,066
Male Head	**Farm**						
1 Person (unrelated indiv.):							
Under 65 years	$2,036	–	–	–	–	–	–
65 years and over	1,830	–	–	–	–	–	–
2 Persons:							
Head under 65 years	2,516	$2,852	–	–	–	–	–
Head 65 years and over	2,286	2,852	–	–	–	–	–
3 Persons	2,965	3,061	$3,235	–	–	–	–
4 Persons	3,909	3,967	3,829	$4,023	–	–	–
5 Persons	4,717	4,774	4,620	4,504	$4,601	–	–
6 Persons	5,410	5,128	5,314	5,198	5,044	$5,121	–
7 or more persons	6,815	6,873	6,738	6,622	6,469	6,237	$6,180
Female Head							
1 Person (unrelated indiv.):							
Under 65 years	$1,884	–	–	–	–	–	–
65 years and over	1,806	–	–	–	–	–	–
2 Persons:							
Head under 65 years	2,353	$2,569	–	–	–	–	–
Head 65 years and over	2,258	2,569	–	–	–	–	–
3 Persons	2,868	2,733	$3,023	–	–	–	–
4 Persons	3,754	3,887	3,870	$3,829	–	–	–
5 Persons	4,504	4,640	4,620	4,582	$4,428	–	–
6 Persons	5,256	5,352	5,314	5,275	5,102	$4,947	–
7 or more persons	6,601	6,700	6,680	6,622	6,449	6,314	$6,006

[a]Reproduced from U.S. Bureau of the Census, Current Population Reports: Consumer Income, *Characteristics of the Low Income Population*, P-60, No. 98, p. 161, March 1974.

meet the needs of "multi-problem" families demonstrating various types of "maladaptive behavior." Indicators include unemployment, low family income, low self-concept, poor internal family relations and other factors.[8] Mountain-Plains admits to the program applicant families with incomes up to approximately 1.5 times the poverty level. For the purposes of this report, we will use the Census data to identify families with incomes up to this level (1.49 times the poverty cutoff) as one of the criteria for eligibility for a Mountain-Plains type of career education program.

2.1.3 The Definition of "Rurality"

A part of the rationale for the Mountain-Plains residential approach to career education is that families living outside major urban areas lack access to the array of services (including career education) needed to enable them to break the poverty cycle. The Mountain-Plains model is based on the premise that a residential, family-based program can best meet the needs of such rural families by providing an integrated, comprehensive array of services in a single setting.

The six-State area served by Mountain-Plains is, for the most part, an agrarian region. Even though there are a number of large communities in these states, the character of all but a few is rural-oriented. Mountain-Plains does not accept applicants from Lincoln and Omaha, Nebraska, the two largest Standard Metropolitan Statistical Areas (SMSAs) in the region. Mountain-Plains does, however, recruit from other parts of the region, including some smaller SMSAs such as Boise, Idaho; Great Falls and Billings Montana; Fargo, North Dakota; and Sioux Falls, South Dakota. Mountain-Plains identifies areas as "rural" on the basis of "general regional characteristics, prevailing occupational patterns, and economic interdependence between the hinterland and population centers."[9]

---

[8] Letter from David Coyle, Director of Research Services, Mountain-Plains Education & Economic Development Program, Inc., to Richard Bale, Abt Associates Inc., January, 1975.

A discussion of other eligibility criteria and our attempt to define a relevant target population using Census variables is presented in a later section of this report.

[9] Letter from D. Coyle, January 9, 1975.

The Census definition of "rural" areas is much more restrictive. It classifies as rural only places of less than 2,500 inhabitants.[10] This definition excludes a number of communities that are essentially rural in character and many communities which are included in Mountain-Plains' recruitment areas. The application of the Census definition of rural as the eligibility criterion in terms of type of place of residence would therefore very seriously underestimate the size of the potential client population for a Mountain-Plains type of residential career education program.

As an alternative to the restrictive definition of rural place used by the Census we have adopted for use in this report a much broader definition of the concept. Essentially, "rural" as used in this report refers to:

a) Places defined by the Census as rural (which include places of 2,500 or less that are located within urban areas); plus

b) Non-metropolitan places (places that are not defined by the Census as Standard Metropolitan Statistical Areas); plus

c) Some Standard Metropolitan Statistical Areas (SMSAs) on the lower end of the SMSA size continuum.[11]

2.1.4 The Number of "Potentially" Eligible Families

Figure 2.1.4-1 on the following page portrays the "potentially" eligible population of families in the United States. There was a total of 51,168,599 families in the nation in 1970. Of these, 10,090,658 (or 19.7%) families had incomes below 1.5 times the poverty cutoff -- that is, 19.7% of the families in the nation were eligible for participation by virtue of their poverty status. Disregarding poverty status there were 20,296,150 -- or 39.7% of the total number of

[10] See Documentation, page 134, Concept 16.

[11] For this report the SMSAs in the states of Maine, Montana, Nevada, New Hampshire, Idaho, North Dakota, South Dakota and Utah were included in our definition of rural place of residence. Restrictions applied on the Public Use Census Tapes to insure confidentiality prevent the SMSA/non-SMSA distinction for these states. Since most of the SMSAs found in these eight states are on the low end of the SMSA size continuum, the decision was made jointly by AAI and NIE to define these areas as "rural" for the purposes of this report. See Documentation, variable H10, page 54.

TOTAL NUMBER OF FAMILIES IN THE UNITED STATES IN 1970: **51,168,599 Families**

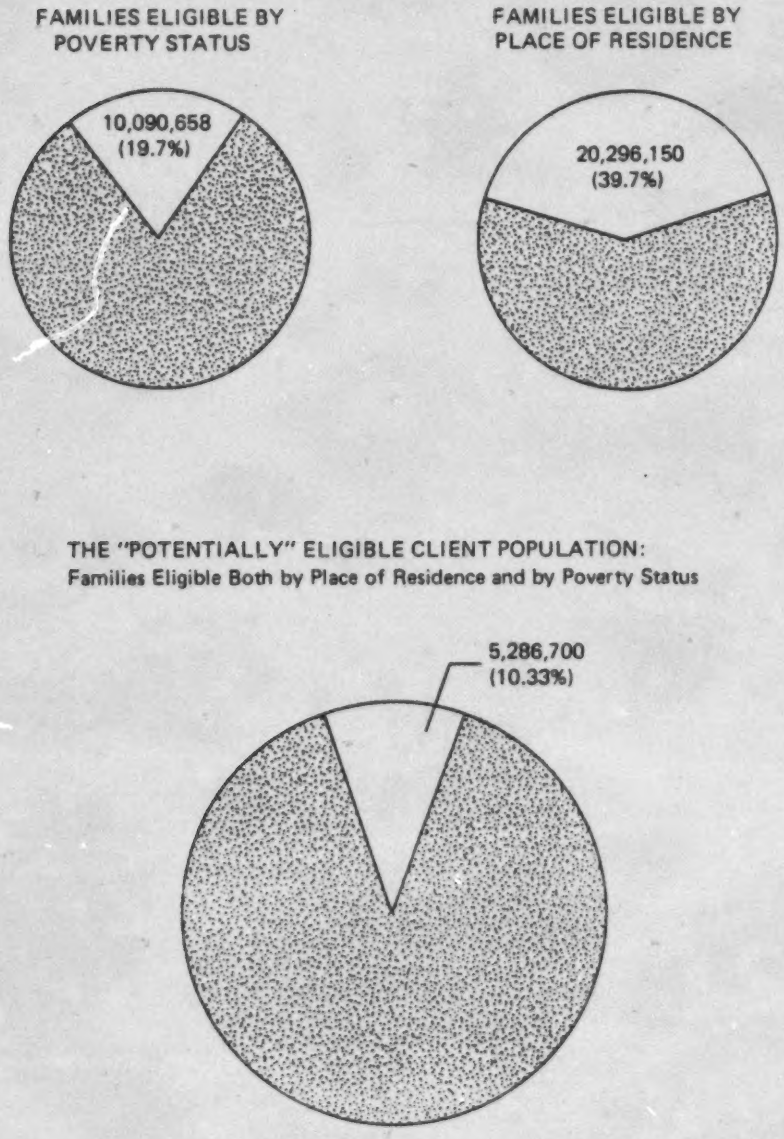


Figure 2.1.4-1

The Number and Percent of Families in the United States in 1970 that were Eligible by Place of Residence, by Poverty Status, and the "Potentially" Eligible Population of Families: Eligible *BOTH* by Place of Residence and by Poverty Status

families in the nation -- living in places that are rural according to the definition of the term employed in this report.

When we simultaneously applied both of the basic eligibility criteria of poverty status and rural place of residence to the national 1969 population of families, approximately 5,286,700 families -- 10.3% of the total number of families in the United States were found to be both poor and rural and therefore potentially eligible for participation in family-based residential career education programs similar to Mountain-Plains.

This group of potentially eligible families must be further specified to identify the number of families eligible according to the criteria of age, education level and ability to work that approximate as closely as possible (using the Census variables) the selection process used by Mountain-Plains.

2.2 Identifying the Eligible Population

Within the broadly defined rural poor population which we refer to in this study as the "potentially" eligible population, there are many families who would not be eligible for participation in a Mountain-Plains type of family-based residential career education program. While Mountain-Plains avoids the use of numerous rigid eligibility criteria, most applicants admitted to the program fall within fairly clearly identifiable bounds that can be approximated by the Census variables. The eligibility criteria that limit the potential target population are:

- Age of the family head,
- Functional educational level of the family head, and
- Physical ability of family head to work.

1) Age of Family Head

The age criterion is introduced to further delimit the potentially eligible population so it more accurately reflects the characteristics of heads-of-families who have participated in the Mountain-Plains Program.

The age range for heads-of-families we have used to define the age-eligibility criterion is 18-49 years. While Mountain-Plains has admitted participants as young as 17 and as old as 59 years, 75% of participant family heads are between 18 and 31 years old.[12] The age range of 18-49 years accurately reflects the Mountain-Plains situation and seems reasonable in terms of providing for sufficient labor force years to allow an economic payback to society on its investment.

2) Education of Family Head

Mountain-Plains screens applicants on the basis of scores on the standardized Wide Range Achievement Test (WRAT) rather than on years of schooling completed. Applicants must demonstrate sufficient arithmetic, reading, and writing skills to take advantage of the career education and other materials offered. We have chosen completion of sixth grade as an approximation of Mountain-Plains criterion. (This cutoff level would exclude only 0.5 percent of program participants.) Seventy percent of participants have completed at least tenth grade education, including household heads who have achieved high school equivalency on the General Educational Development (GED) test.[12]

3) Ability of Family Head to Work

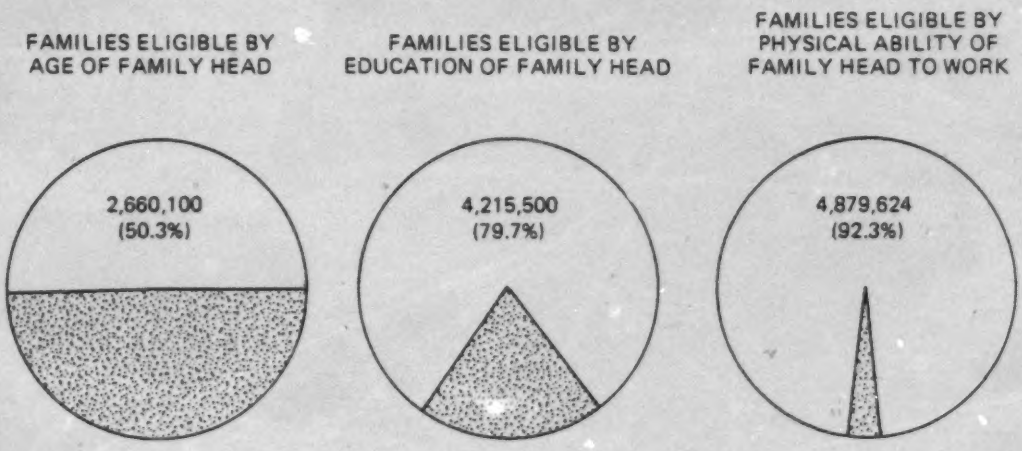
Existence of a health problem that precludes any type of work, a Census variable, is used to identify those persons so handicapped that a career education program such as Mountain-Plains would not be relevant. This criterion retains in the eligible population all handicapped persons who are able to work. Mountain-Plains has trained some participants who were disabled and unable to work at their previous job, but could still learn a new job. The criterion chosen reflects as closely as possible the operational screening approach used by Mountain-Plains.

2.2.1 The Size of the Eligible Client Population

Figure 2.2.1-1 on the following page shows the number and percent of the "potentially" eligible families that were eligible on the age,

[12] Based on an Abt Associates analysis of pre-entry screening interviews conducted by Mountain-Plains staff.

THE " POTENTIALLY" ELIGIBLE POPULATION IN THE UNITED STATES IN 1970 : **5,286,700 Families**


FAMILIES ELIGIBLE BY AGE OF FAMILY HEAD
2,660,100 (50.3%)
FAMILIES ELIGIBLE BY EDUCATION OF FAMILY HEAD
4,215,500 (79.7%)
FAMILIES ELIGIBLE BY PHYSICAL ABILITY OF FAMILY HEAD TO WORK
4,879,624 (92.3%)

THE TOTAL "ELIGIBLE CLIENT POPULATION" OF FAMILIES IN 1970:

Those of the "Potentially" Eligible Population that are Eligible by Age and Education and Physical Ability of Family Head

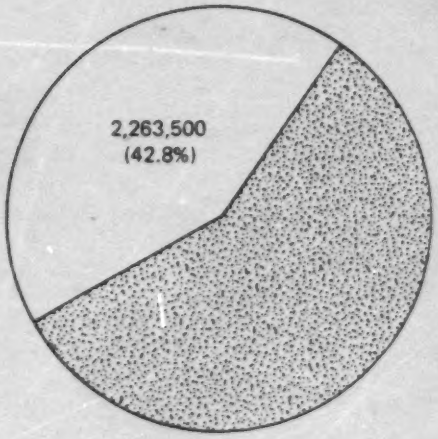


Figure 2.2.1-1

The Number and Percent of the Potentially Eligible Population of Families that are Eligible by Age of Family Head, Education of Family Head, Physical Ability of Family Head to Work, and the Total Eligible Client Population of the Families: The Population of Families that is Eligible by Age, Education and Physical Ability to Work of Family Head Combined.

education and physical ability criteria separately, and when all three criteria were applied simultaneously: the eligible client population of families.

Of the "potentially" eligible families in the nation we found that 2,660,100 (or 50.3%) of family heads were eligible when the age criterion alone was considered. On the education criterion alone 4,215,500 (or 79.7%) were eligible, and 4,879,624 (or 92.3%)[13] were eligible when only the physical ability to work criterion was applied.

When the age, education and physical ability to work criteria were all applied simultaneously to the total "potentially" eligible population, Figure 2.2.1-1 shows that:

- 2,263,500 families met all criteria used to identify the eligible population of families.
- The eligible population included 10,955,340 individuals.
- The eligible population constituted 42.8% of the "potentially" eligible population of families.
- The eligible population constituted 4.4% of the total number of families and 5.4% of the total population in 1970.

This is not an insignificant segment of our national population from either a humanitarian or an economic point of view.

To put the eligible target population in a slightly different perspective, there were 51.2 million families in the United States. Of these, 5.3 million had income below one-and-one-half times the poverty level and lived in the geographical areas we have adopted to define rural places of residence. This group of 5.3 million families was narrowed to 2.3 million by age, education and physical eligibility criteria together. The age criterion alone would eliminate 50%, the education criterion alone would eliminate 20% and a health problem preventing work would screen out 8%. All criteria applied simultaneously still left a large client population eligible for entrance into a family-based residential career education program such as Mountain-Plains: some 2.3 million families accounting for nearly 11 million persons.

---

[13] The number and percent of family heads ineligible on the physical ability to work criterion is partially confounded with the age criterion, since persons over age 65 are assigned a "not applicable" code. See Documentation, variable P83, page 80, and Concept 93, page 152.

CHAPTER THREE

CHARACTERISTICS OF THE ELIGIBLE CLIENT POPULATION ON A NATIONAL BASIS

In order to arrive at a national estimate of the size of the client population for which a family-based residential career education program such as Mountain-Plains would be relevant we applied, in the preceding chapter, various limiting eligibility criteria to the national population. This procedure resulted in the identification of a group of approximately 2,263,500 families that constituted the client population eligible for programs similar to Mountain-Plains. We now turn our attention to a detailed description of this target group.

We will proceed by creating four distinct family profiles based on a cross-classification of two very basic characteristics: a) the family's poverty status; and b) whether both spouses, or only one parent is present in the family. We will then go on to describe the families in each profile, and all eligible families as a group, in terms of:

- Basic demographic characteristics,
- Housing conditions and costs,
- Employment characteristics of family heads, and
- Income characteristics.

Where comparable data are available, we shall also present data for all families in the United States so the reader will have a baseline against which to compare the characteristics of the client population eligible for participation in career education programs similar to Mountain-Plains.

3.1 Four Basic Family Profiles

We have selected family poverty status and family structure as the bases for creating four basic family profiles because both

characteristics indicate underlying family situations relevant to the concept of family-based residential career education for disadvantaged families. Poverty status not only is associated with other social characteristics, but, broken into the two categories presented below, it provides the reader with a basis for determining whether the eligibility criteria should be at the official poverty level or somewhat higher. Family structure classified on the basis of the presence of both spouses or only one parent is important because of the different needs impplied by the two structures, both for the families themselves and in terms of different types of services that programs might need to provide.

Table 3.1-1 on the following page shows that 1,071,300 of the eligible families in the nation were below the official poverty level in 1970. We refer to these families as "poor" and they accounted for approximately 47% of all eligible families. In addition, there were approximately 1,192,200 families (53% of the eligible population) between 1.00 and 1.49 times the poverty level. These families are referred to as "near-poor."

In terms of family structure 1,734,000, or approximately 77% of the eligible families, had both the husband and wife present, while there were 529,500 single-parent families. Among single-parent families 472,400 were single female heads of families and only 57,100 single-parent families were headed by males. Single-parent families were predominantly headed by women with children to support.

By cross-classifying the two levels of family poverty status with two-spouse/single-parent family structure we arrived at the four basic family profiles used in the detailed description of the characteristics of the eligible population that follows. Table 3.1-2 below describes the profiles that result from the cross-classification and the number and percent of families in each profile. The family profiles are:

(1) Poor, with family head and spouse both present (705,600 families);

(2) Poor, with single-parent family (365,700 families);

(3) Near-poor, with family head and spouse both present (1,028,400 families); and

(4) Near-poor, with single-parent family (163,800 families).

Table 3.1-1

Number and Percent of the Total Eligible Client Population of Families by Selected Categories of Poverty Status and Family Type

CATEGORIES OF ELIGIBILITY CRITERIA	NUMBER OF ELIGIBLE FAMILIES	PERCENT OF TOTAL ELIGIBLE FAMILIES	
TOTAL ELIGIBLE FAMILIES	2 263 500	100.0%	
POVERTY STATUS			
a) 0.00 - 0.99 ("Poor")	1 071 300	47.3%	
b) 1.00 - 1.49 ("Near-Poor")	1 192 200	52.7%	
			100%
FAMILY TYPE			
a) Husband & Wife Present	1 734 000	76.6%	
b) Single Parent Families	529 500	23.4%	
			100%
(i) Single Female Head	472 400	20.9%	
(ii) Single Male Head	57 100	2.5%	

Table 3.1-2

Number and Percent of the Total Eligible Client Population of Families in 1970 in Each of 4 Profiles of Characteristics as Defined by Selected Categories of Poverty Status and Family Type

PROFILE #	FAMILY PROFILE DESCRIPTION	NUMBER OF FAMILIES IN PROFILE	PERCENT OF TOTAL ELIGIBLE CLIENT POPULATION
1	Poor[a], with Family Head and Spouse both Present	705 600	31.2%
2	Poor, with Single-Parent Family	365 700	16.2%
3	Near-Poor[b] with Family Head and Spouse both Present	1 028 400	45.4%
4	Near-Poor, with Single-Parent Family	163 800	7.2%

[a] "Poor" means the family's Poverty Index = 0.00 - 0.99.

[b] "Near-Poor" means the family's Poverty Index = 1.00 - 1.49.

Note that there were over twice as many single-parent families below the poverty line as there were between 1.00 and 1.49 times the poverty line. Note also that among families below the poverty line approximately 50% were single-parent families, while among "near-poor" families only 16% were single-parent families.

With this brief overview of the four basic family profiles in mind, we now turn to a more detailed characterization of the eligible families in general and each of the four profiles separately.

3.2 A Note on Reading Tables 3.3-1 Through 3.6-1

Tables 3.3-1 through 3.6-1 present various sets of characteristics, on a national basis, for each of the four family profiles described above, for all eligible families, and for the total population of families in the nation. It is important to note the direction in which the various sections of these tables sum to 100%. Since it is our intention to provide a separate description of each of the four family profiles, all eligible families, and the total population of families in the nation, the categories of each separate characteristic in the tables sum to 100% within each column of the tables (there are six columns in each table, one for each of the four family profiles, one for all eligible families, and one for the total national population of families). For example, one of the characteristics in Table 3.3-1 is "Race of Family Head," which has four categories: white, black, American Indian, and "other." Within the family profile column headed "Poor, Head and Spouse Present," these four racial categories sum to 100% of the 705,600 families in the first family profile. The same is true for each of the five other columns in the table. Thus by comparing the percentages within a column one can see how the categories of a characteristic are distributed within a profile. By comparing percentages within the same row across columns one can see how the four profiles, all eligible families, and the total national population of families differ in terms of their composition on the categories of the characteristic.

With the organization of the tables in mind, we now turn to a detailed characterization of the eligible families in the nation.

3.3 Demographic Characteristics of Eligible Families by Four Family Profiles

In this section we describe some basic demographic characteristics of the eligible families in each of the four profiles, and compare these characteristics with those found for all eligible families in the U.S. as well as for the total national population of families. Table 3.3-1 on the following page presents the data relevant to the discussions below.

3.3.1 Race of Family Head

Referring to Table 3.3-1 on the following page we see that approximately 84.3% of the heads of eligible families were white, 14.4% were black, 1.1% were American Indian, and 0.2% were from other racial classifications. Compared to the total national population of families, whites were under-represented in the eligible population by about 5.2% and blacks were over-represented about 4.9%, while American Indians and other races had very nearly a proportional representation. Within the poor, single-parent family profile blacks were very heavily over-represented (by 17.4%) while whites were under-represented to a similar degree. American Indians and other races were fairly evenly represented across the four family profiles.

When we examined the figures for heads of families who were of Spanish descent we found that representation in the eligible population was about the same as in the total population in the nation. This representation was also spread fairly evenly across the four family profiles.

3.3.2 Age of Family Head

An inspection of the age distributions for heads of families in Table 3.3-1 showed little in the way of differences within or across the four family profiles and the total eligible population. The percentages of families in each of the age groups were quite similar, with the exception that the heads of near-poor single parent families tended to be more heavily represented in the over-40 age groupings.

Table 3.3-1

Basic Demographic Characteristics of the Eligible Population of Families in Each of 4 Family Profiles, for All Eligible Families, and for All Families in the United States

CHARACTERISTICS	FAMILY PROFILE TYPE				ALL ELIGIBLE FAMILIES (2 263 500 Families)	ALL FAMILIES IN THE UNITED STATES (51 168 599 Families)
	POOR		NEAR-POOR			
	Both Spouses Present (705 600 Families)	Single Parent (365 700 Families)	Both Spouses Present (1 028 400 Families)	Single Parent (163 800 Families)		
1. Race of Family Head (number and percent in profile):						
a) White	583 100 (82.6%)	261 000 (71.4%)	924 400 (89.9%)	1 140 300 (85.7%)	1 908 800 (84.3%)	45 770 351[a] (89.5%)
b) Black	111 100 (15.7%)	98 300 (26.9%)	94 400 (9.2%)	21 100 (12.9%)	324 900 (14.4%)	4 863 401 (9.5%)
c) American Indian	9 400 (1.3%)	5 400 (1.5%)	8 200 (0.8%)	1 700 (1.0%)	24 700 (1.1%)	534 847 (1.0%)
d) Other	2 000 (0.3%)	1 000 (0.3%)	1 400 (0.1%)	700 (0.4%)	5 100 (0.2%)	
2. Family Head of Spanish Descent						
a) Yes	31 500 (4.5%)	11 300 (3.1%)	36 300 (3.5%)	4 100 (2.5%)	83 200 (3.7%)	2 039 085[a] (4.0%)
b) No	674 100 (95.5%)	354 400 (96.9%)	992 100 (96.5%)	159 700 (97.5%)	2 180 300 (96.3%)	49 129 514 (96.0%)
3. Age of Family Head						
a) 18 - 19	22 000 (3.1%)	7 000 (1.9%)	19 200 (1.9%)	1 800 (1.1%)	50 000 (2.2%)	310 084[f] (1.0%)
b) 20 - 24	120 700 (17.1%)	49 000 (13.4%)	157 800 (15.3%)	15 200 (9.3%)	342 700 (15.1%)	3 231 759 (10.6%)
c) 25 - 29	110 700 (15.7%)	66 700 (18.2%)	177 800 (17.3%)	22 800 (13.9%)	378 000 (16.7%)	5 293 681 (17.3%)
d) 30 - 34	131 600 (18.7%)	75 400 (20.6%)	208 100 (20.2%)	27 000 (16.5%)	442 100 (19.5%)	5 165 689 (16.9%)
e) 35 - 39	125 400 (17.8%)	68 200 (18.6%)	191 800 (18.7%)	32 900 (20.1%)	418 300 (18.5%)	5 225 126 (17.1%)
f) 40 - 44	105 600 (15.0%)	56 700 (15.5%)	161 800 (15.7%)	33 200 (20.3%)	357 300 (15.8%)	5 661 519 (18.5%)
g) 45 - 49	89 600 (12.7%)	42 700 (11.7%)	111 900 (10.9%)	30 900 (18.9%)	275 100 (12.2%)	5 694 035 (18.6%)
4. Education of Family Head						
a) 6 - 8	175 200 (24.8%)	65 400 (17.9%)	194 300 (18.9%)	25 400 (15.5%)	460 300 (20.3%)	13 644 320[a b] (26.7%)
b) 9 - 11	123 500 (17.5%)	76 400 (20.9%)	180 700 (17.6%)	33 500 (20.5%)	414 100 (18.3%)	9 943 865 (19.4%)
c) 12	303 500 (43.0%)	190 500 (52.1%)	521 600 (50.7%)	87 000 (53.1%)	1 102 600 (48.7%)	15 233 381 (29.8%)
d) More than 12	103 400 (14.7%)	33 400 (9.1%)	131 800 (12.8%)	17 900 (10.9%)	286 500 (12.7%)	12 347 033 (24.1%)
5. Sex of Family Head (number and percent in profile):						
a) Male	705 600 (100%)	27 800 (7.6%)	1 028 400 (100%)	29 300 (17.9%)	1 791 100 (79.1%)	45 629 526[c] (89.1%)
b) Female	-0- -0-	337 900 (92.4%)	-0- -0-	134 500 (82.1%)	472 400 (20.9%)	5 539 073 (10.8%)
6. Does Family Head Have a Disability Limiting Work?						
a) Yes	70 400 (10.0%)	30 100 (8.2%)	83 800 (8.1%)	12 400 (7.6%)	196 700 (8.7%)	(6.9%)[d]
b) No	635 200 (90.0%)	335 600 (91.8%)	944 600 (91.9%)	151 400 (92.4%)	2 066 800 (91.3%)	(93.1%)

(continued)

Table 3.3-1

Basic Demographic Characteristics of the Eligible Population of Families in Each of 4 Family Profiles, for All Eligible Families, and for All Families in the United States

CHARACTERISTICS	FAMILY PROFILE TYPE				ALL ELIGIBLE FAMILIES (2 263 500 Families)	ALL FAMILIES IN THE UNITED STATES (51 168 599 Families)
	POOR		NEAR-POOR			
	Both Spouses Present (705 600 Families)	Single Parent (365 700 Families)	Both Spouses Present (1 028 400 Families)	Single Parent (163 800 Families)		
7. Average Number of Persons in a Family	5.06	4.28	5.05	3.88	4.84	3.56[e]
8. Average Number of Related Children Under 18 Years in a Family	2.91	2.96	2.89	2.37	2.87	2.36[e]

[a]U.S. Bureau of the Census, Census of Population: 1970, Vol. I, *Characteristics of the Population*, Part I, United States Summary-Section 2, Table 209, pp. 1-66.

[b]This category for the entire U.S. includes heads of families who have anything less than an eighth grade education.

[c]*Characteristics of the Population*, Table 259, pp. 1-962.

[d]Published census data were not available on the disability of heads of families. These figures are based on data for all persons between 16 and 64 years old (excluding inmates of institutions and persons attending school) and reflect the percent who are disabled but still can work. U.S. Bureau of the Census, Census of Population: 1970, *General Social and Economic Characteristics*, Final Report, PC(1)-C1, United States Summary, Table 89, pp. 1-388.

[e]U.S. Bureau of the Census, Census of Population: 1970, *General Social and Economic Characteristics*, Table 95, pp. 1-398.

[f]This category includes all family heads between 15 and 19 years of age. Percents are based on 30,589,993 family heads between the ages of 15 and 49. U.S. Bureau of the Census, Census of Population: 1970, *Detailed Characteristics*, Final Report PC(1)-D1, United States Summary, Table 204.

3.3.3 Education of Family Head

Table 3.3-1 shows that 20.3% of the heads of eligible families had completed between sixth and eighth grades, 18.3% had completed some high school, but had not graduated. Interestingly, 48.7% had completed high school, and an additional 12.7% had completed at least one year of school beyond high school. Among the four family profiles, poor families with both spouses present had an idiosyncratic education distribution compared to the other three profiles. They had a noticeably higher percentage of heads in the sixth to eighth grade range (from 5% to 9% more than the other profiles) while at the same time having the highest percentage of family heads who have completed more than a high school education. They also had between 8% and 10% lower representation in the high school graduate category. Comparing the heads of all eligible families with the national population of family heads[14] we see that the eligible population and the total national population had similar percentages of family heads who had completed some high school but had not graduated. The percentage of family heads in the eligible population who had completed high school but no post-secondary education was 19% higher than in the total national population, while the percentage of all family heads in the nation who had completed some post-secondary education was 12% higher than among the eligible population.

3.3.4 Sex of Family Head

This characteristic is not as informative as it could be because the Census arbitrarily defines the male spouse as head of the family if he is present.[15] Among single heads of families, however, the percentage of female heads was 10% higher in the poor family profile than in the near-poor profile. Among all eligible families the percentage of single female family heads was twice that in the national population.

---

[14] See footnote 'b' to Table 3.3-1 for an explanation of the non-comparability between the figures for all eligible families and the national population regarding the 6th - 8th grade category.

[15] See Documentation, Concept 80, pages 148-149.

3.3.5 Disability Limiting Work

Among the total national population 6.9% of all persons between the ages of 16 and 64 had a disability that limited their ability to work while 8.7% of the heads of eligible families had such disabilities, a percentage slightly greater than in the total national population. Within the four family profiles the heads of poor family with both spouses present had the highest percentage of disabilities limiting work -- 10% -- which was 2% higher than in other profiles and 3% higher than the percentage in the national population.

3.3.6 Family Size and Children Under 18

The average number of persons per family in the United States was 3.56 at the time the 1970 Census was conducted, while there were 4.84 persons per family among the total eligible population. For families in the eligible population with both spouses present families had an average of slightly over 5 members, while single-parent families, especially the near-poor, were closer to the overall national average in size.

On the other hand, among eligible families the average number of related children was very close to the national average, being only 0.5 children greater. This indicates that the larger average family size among eligible families as compared to the national population was due to more persons in eligible families over 18 years old, and may well include members of the extended family (for example, grandparents) who are in the upper part of the age distribution.

3.4 Housing Conditions and Costs for Eligible Families by Four Profiles

In this section we provide a description of the housing conditions in which the eligible population lived and how much such housing cost. In addition, we provide a comparison of housing conditions and costs among the four family profiles, all eligible families, and all housing units

in the nation.[16] The discussion of housing conditions and costs is based on Table 3.4-1 on the following page.

3.4.1 Housing Costs

The data on housing costs presented in Table 3.4-1 are based on only those families and housing units that were in the rent universe[17] at the time of the 1970 Census. Gross monthly rent refers to monthly contract rent plus the average monthly cost of utilities, whether included in the rent or paid for separately by the tenant.[18] At the time the 1970 Census was conducted the average gross monthly rent for all rental housing units in the nation was $110.00 per month, whereas the average gross rent for all eligible families was $87.00 per month, about $23.00 per month less than the national average. Among the four family profiles we see that poor families paid about $83.00 per month, with near-poor families paying about $9.00 more at $92.00 per month. Considered by themselves, these figures seem "appropriate:" on the average poor families paid less for rent than did near-poor families who, in turn, paid less for rent than did the total national population of families in the rent universe. But let us consider the relative cost of gross rent for the eligible client population as compared to the national population in general.

Looking at gross rent as a percent of total family income in Table 3.4-1 we see that families in the eligible client population paid a staggering percentage of their total family income for housing, expecially compared to the total national population. Over 38% of the entire eligible population paid 35% or more of their total family income for housing costs, while only 16.6% of the total national population incurred such a relatively high cost for housing. Inspection of the data for each of the four profiles indicates that housing costs hit the

---

[16] We use all housing units in the nation rather than housing conditions for all families because comparible information is not available for families from published Census documents, with the exceptions noted in the footnotes to Table 3.4-1.

[17] See footnote 'a' to Table 3.4-1.

[18] See Documentation, Concept 167, pages 166-167.

TABLE 3.4-1

Housing Conditions and Costs for Eligible Families in Each of 4 Family Profiles, For All Eligible Families, and For All Families in the United States

CHARACTERISTICS	FAMILY PROFILE TYPE				ALL ELIGIBLE FAMILIES (2 263 500 Families)	ALL FAMILIES IN THE UNITED STATES (51 168 599 Families)
	POOR		NEAR-POOR			
	Both Spouses Present (705 600 Families)	Single Parent (365 700 Families)	Both Spouses Present (1 028 400 Families)	Single Parent (163 800 Families)		
1. Average, Gross Monthly Rent	$83 [a] (n = 231 900)	$84 [a] (n = 194 400)	$91 [a] (n = 311 100)	$92 [a] (n = 70 200)	$87 [a] (n = 807 600)	$110 [b]
2. Gross Rent as Percent of Total Family Income [a]						
a) Less than 20%	47 900 (21.6%)	14 200 (8.4%)	128 400 (41.2%)	20 400 (29.1%)	210 900 (27.2%)	7 852 134 [i] (56.2%)
b) 20-24%	22 000 (9.9%)	14 500 (8.5%)	63 100 (20.2%)	11 400 (16.2%)	111 000 (14.4%)	1 889 218 (13.6%)
c) 25-34%	36 500 (16.4%)	29 300 (17.2%)	69 900 (22.5%)	21 200 (30.2%)	156 900 (20.3%)	1 845 679 (13.3%)
d) 35% or more	115 800 (52.1%)	112 000 (65.9%)	49 700 (16.0%)	17 200 (24.5%)	294 700 (38.1%)	2 308 546 (.6%)
3. Average Total Number of Persons Living in Housing Unit	5.07	4.34	5.06	3.96	4.87	3.11 [c]
4. Number of Persons per Room						
a) .50 or less	85 100 (12.1%)	72 400 (19.8%)	85 500 (8.3%)	45 100 (27.5%)	288 100 (12.7%)	31 729 805 [d] (50.0%)
b) .51-.75	140 700 (19.9%)	85 100 (23.3%)	214 100 (20.8%)	46 800 (28.6%)	486 700 (21.5%)	14 416 343 (22.7%)
c) .76-1.00	212 000 (30.0%)	106 600 (29.1%)	394 300 (38.3%)	44 500 (27.2%)	757 400 (33.5%)	12 238 575 (19.3%)
d) 1.01-1.50	168 600 (23.9%)	63 400 (17.3%)	262 300 (25.5%)	19 500 (11.9%)	513 800 (22.7%)	3 781 905 (6.0%)
e) 1.51-2.00	69 000 (9.8%)	25 400 (6.9%)	58 600 (5.7%)	5 900 (3.6%)	158 900 (7.0%)	1 278 563 (2.0%)
f) More Than 2.00	30 200 (4.3%)	12 800 (3.5%)	13 600 (1.3%)	2 000 (1.2%)	58 600 (2.6%)	
5. Number and Percent of Families Without Complete Private Kitchen Facilities	102 100 (14.5%)	52 600 (14.4%)	67 000 (6.5%)	11 300 (6.9%)	233 000 (10.3%)	2 972 118 [e] (4.4%)
6. Number and Percent of Families With NO Piped Hot Water	141 100 (20.0%)	69 100 (8.9%)	103 500 (10.1%)	14 200 (8.7%)	327 900 (14.5%)	3 109 013 [e] (4.6%)
7. Number and Percent of Families with NO Flush Toilet, or NO Private Flush Toilet	137 000 (19.4%)	60 600 (16.6%)	102 800 (10.0%)	12 400 (7.6%)	312 800 (13.8%)	3 217 601 [e] (4.8%)
8. Number and Percent of Families With NO Bathtub or Shower, or NO Private Bathtub or Shower	141 700 (20.1%)	69 900 (19.1%)	106 500 (10.4%)	14 100 (8.6%)	332 200 (14.7%)	3 660 174 [e] (5.4%)
9. Number and Percent of Families With NO Telephone Available	277 000 (39.3%)	136 900 (37.4%)	292 800 (28.5%)	42 600 (26.0%)	749 300 (33.1%)	8 033 628 [f] (12.7%)
10. Number and Percent of Families With NO Dishwasher	642 400 (91.0%)	340 000 (93.0%)	939 500 (91.4%)	150 000 (91.6%)	2 071 900 (91.5%)	51 482 456 [g] (81.1%)

(continued)

TABLE 3.4-1

Housing Conditions and Costs for Eligible Families in Each of 4 Family Profiles, For All Eligible Families, and For All Families in the United States

CHARACTERISTICS	FAMILY PROFILE TYPE				ALL ELIGIBLE FAMILIES (2 263 500 Families)	ALL FAMILIES IN THE UNITED STATES (51 168 599 Families)
	POOR		NEAR-POOR			
	Both Spouses Present (705 600 Families)	Single Parent (365 700 Families)	Both Spouses Present (1 028 400 Families)	Single Parent (163 800 Families)		
11. Number and Percent of Families With NO T.V.	49 200 (7.0%)	30 200 (8.3%)	44 300 (4.3%)	7 200 (4.4%)	130 900 (5.8%)	2 852 814 [g] (4.5%)
12. Number and Percent of Families That Can NOT Receive UHF T.V. Signals[h]	469 700 (66.6%)	242 800 (66.4%)	628 100 (61.1%)	99 700 (60.9%)	1 440 300 (63.6%)	30 636 605 [g] (48.3%)
13. Number and Percent of Families With NO Battery Operated Radio	251 200 (35.6%)	158 700 (43.4%)	289 400 (28.1%)	54 500 (33.3%)	753 800 (33.3%)	17 338 929 [g] (27.3%)

[a]The average gross monthly rent is based on those families in the rent universe. Excluded are those families who own their housing unit, rent without cash rent, or live in one-family houses on places of 10 acres or more. The number of families used in estimating the average for each profile and for all eligible families is shown in the table. See *Documentation*, Concept 187, page 166, and Variable H34, page 57.

[b]Based on 54,159,018 housing units. U.S. Bureau of the Census, Census of Population: 1970, *General Social and Economic Characteristics*, Final Report, PC(1)-C1, United States Summary, Table 95, pp. 1-400.

[c]Based on 63,449,747 households. U.S. Bureau of the Census, Census of Population: 1970, *General Population Characteristics*, Final Report, PC(1)-31, United States Summary, Table 54, pp. 1-278.

[d]Based on 63,445,192 occupied housing units. U.S. Bureau of the Census, Census of Housing: 1970, *Detailed Housing Characteristics*, Final Report, HC(1)-B1, United States Summary, Table 30, pp. 1-292.

[e]Based on 67,699,084 year-round housing units. *Detailed Housing Characteristics*, Table 29, pp. 1-280.

[f]Based on 63,445,192 occupied housing units. *Detailed Housing Characteristics*, Table 29, pp. 1-280.

[g]Based on 63,446,641 occupied housing units. *Detailed Housing Characteristics*, Table 24, pp. 1-254.

[h]This includes families with no TV set as well as families that have TV sets that are not equipped to receive UHF signals.

[i]Computed on the basis of 13,895,577 rental units occupied by families on data presented in U.S. Bureau of the Census, Census of Population: 1970, *Subject Reports, Final Report PC(2)-9A, Low Income Population*, Table 36, p. 410.

poorest families hardest. Nearly 66% of poor single-parent families paid 35% or more of their total family income for gross rent, as did about 52% of poor two-spouse families. Among the near-poor, about 25% of single-parent families and 16% of two-spouse families paid 35% or more of their total family income for rent. Figure 3.4-1 on the following page graphically illustrates these relationships.

Consider the relative cost of renting incurred by the eligible population from a slightly different perspective. A rule of thumb that is frequently applied by real estate firms and mortgage institutions is that housing payments should not exceed 25% of gross total income, or the cost of housing will pose a serious finanical strain. Among the total national population of families in the rent universe in 1969, approximately 30% were paying more than 25% of their gross income for rent, while over 58% of all eligible families were exceeding the "25% rule-of-thumb." Within the eligible group over 83% of poor, single-parent families were in this situation, along with 69% of poor two-spouse families, 39% of near-poor two-spouse families, and 55% of near-poor single-parent families. In terms of the "25% rule-of-thumb" the high relative cost of rent for the eligible population as well as for those who paid 35% or more is graphically depicted in Figure 3.4-1.

The burden that housing costs place on the rural poor should be considered within the context of the adequacy of the housing units. Referring again to Table 3.4-1 we now examine the adequacy of the housing in which the eligible population lived.

3.4.2 Adequacy of Housing Units

In the United States as a whole, there was an average of 3.11 persons per housing unit in 1970 and 50% of the population lived in dwelling units in which the persons-to-space ratio was 1/2 a person per room or less. In the total eligible population there was an average of 4.87 persons per housing unit (nearly 2 persons more than in the national average), and fewer than 13% had enough space that there was 1/2 a person or less per room. Put differently, in the nation as a whole only 8% of the housing units were occupied by more than one person per room, but

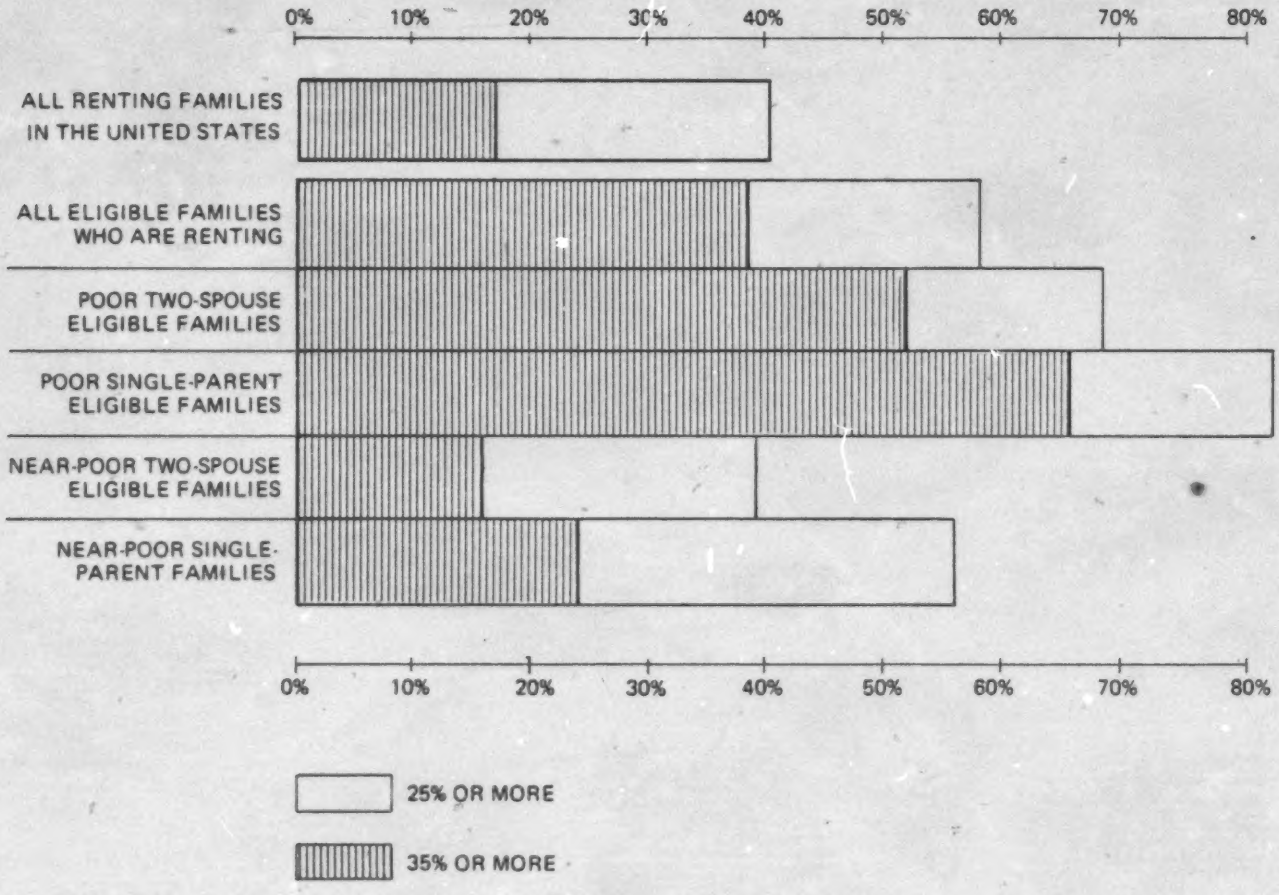


Figure 3.4-1

Percent of Families in the Rent Universe in 1969 whose Gross Rent was 25% or More and 35% or More of their Total Family Income, by All Eligible Families, Each of 4 Family Profiles, and All Families in the United States in the Rent Universe

among eligible families 32.3% lived in housing units in which there was more than one person per room. The eligible population, on the average, clearly lived in more crowded housing than did the population as a whole. If this was the case, the question that next arises is, "Was the quality of the housing in which the eligible population lived comparable to the housing of the rest of the nation?"

Turning again to Table 3.4-1 we find that without exception, when compared to all housing units in the nation, a higher percentage of the housing in which the eligible population lived was lacking basic equipment. Also, without exception, poor families were somewhat worse off than near-poor families in terms of basic housing conditions.

Over 10% of eligible families either had incomplete kitchen facilities or shared their kitchen with another family. Over 14% of eligible families had no piped hot water, nearly 14% either had no flush toilet or had a flush toilet they had to share, nearly 15% had no bathtub or shower or had to share the one to which they had access, 33% had no telephone available, 92% had no dishwasher, 6% had no TV, and 33% did not have a battery operated radio. Nearly 64% (including those who did not have a television set) could not receive UHF television signals (the type broadcast by the ATS satellites).

Much of the housing in which the eligible population lived was lacking in one or more of the basic pieces of equipment that commonly define minimally acceptable housing standards. Yet such housing (when rented for cash) cost only $23.00 a month less than the national average and consumed a very high percentage of the total family income of eligible families.

3.5 Employment Characteristics of Heads of Eligible Families by Four Profiles

In the preceding sections we described the basic demographic characteristics of the eligible population of families and the housing conditions in which they live. We turn now to an examination of the employment characteristics of the heads of eligible families. The following discussion is based on Table 3.5-1 below.

Table 3.5-1

Employment Characteristics of Heads of Eligible Families in Each of 4 Family Profiles, for All Eligible Families, and for Heads of All Families in the United States.

CHARACTERISTICS	FAMILY PROFILE TYPE				ALL ELIGIBLE FAMILIES (2 263 500 Families)	ALL FAMILIES IN THE UNITED STATES (51 168 599 Families)
	POOR		NEAR-POOR			
	Both Spouses Present (705 600 Families)	Single Parent (365 700 Families)	Both Spouses Present (1 028 400 Families)	Single Parent (163 800 Families)		
1. Employment Status of Family Heads						
a) Employed	615 800 (87.3%)	177 300 (48.5%)	966 800 (94.0%)	125 200 (76.4%)	1 885 100 (83.3%)	40 910 885[a] (80.0%)
b) Not Employed	33 600 (4.8%)	20 900 (5.7%)	31 700 (3.1%)	7 000 (4.3%)	93 200 (4.1%)	1 097 634 (2.1%)
c) Not in Labor Force	56 200 (8.0%)	167 500 (45.8%)	29 900 (2.9%)	31 600 (19.3%)	285 200 (12.6%)	9 160 080 (17.9%)
2. Number and Percent of Family Heads Who Worked and Did Not Work During the Previous Year						(n = 35 937 081)
a) Did not work during the previous year	43 300 (6.1%)	143 800 (39.3%)	12 100 (1.2%)	21 500 (13.1%)	220 700 (9.8%)	7 276 281[a, b] (14.4%)
b) Worked during the previous year	662 300 (93.9%)	221 900 (60.7%)	1 016 300 (98.8%)	142 300 (86.9%)	2 042 800 (90.2%)	28 660 800 (85.6%)
3. Number and Percent of Family Heads by Number of Weeks Worked During Previous Year						
a) 13 weeks or less	43 500 (6.6%)	46 800 (21.1%)	16 300 (1.6%)	10 100 (7.1%)	117 700 (5.7%)	2 650 738 (6.2%)
b) 14 - 26	46 200 (7.0%)	38 800 (17.5%)	34 300 (3.4%)	10 600 (7.4%)	129 900 (6.4%)	
c) 27 - 39	65 700 (9.9%)	33 100 (14.9%)	67 000 (6.6%)	13 900 (9.8%)	179 700 (8.8%)	2 086 380 (4.8%)
d) 40 - 47	60 900 (9.2%)	19 400 (8.7%)	86 300 (8.5%)	14 100 (9.9%)	180 700 (8.8%)	5 766 831 (13.4%)
e) 48 - 49	43 300 (6.5%)	9 300 (4.2%)	63 400 (6.2%)	9 100 (6.4%)	125 100 (6.1%)	
f) 50 - 52	402 700 (60.8%)	74 500 (33.6%)	749 000 (73.7%)	84 500 (59.4%)	1 310 700 (64.2%)	32 579 275 (75.6%)
4. Number and Percent of Employed Family Heads Who Worked and Did Not Work During the Reference Week	(n = 662 300)	(n = 221 900)	(n = 1 016 300)	(n = 142 300)	(n = 2 042 800)	(n = 28 660 800)[h]
a) Did not work during reference week	75 800 (11.4%)	50 300 (22.7%)	119 400 (11.7%)	21 400 (15.0%)	266 900 (13.1%)	668 396[h] (2.3%)
b) Worked during reference week	586 500 (88.6%)	171 600 (77.3%)	896 900 (88.3%)	120 900 (85.0%)	1 775 900 (86.9%)	27 992 404[h] (97.7%)
5. Number of Hours Worked by Employed Family Heads at Work During the Reference Week	(n = 586 500)	(n = 171 600)	(n = 896 900)	(n = 120 900)	(n = 1 775 900)	(n = 27 992 404)[h]
a) 1 - 34 hours	84 500 (14.4%)	55 900 (32.5%)	83 200 (9.3%)	22 300 (18.4%)	245 900 (13.8%)	2 465 146[h] (8.8%)
b) 35 - 40 hours	228 700 (39.0%)	82 600 (48.2%)	386 900 (43.1%)	70 100 (58.0%)	768 300 (43.3%)	13 860 698 (49.5%)
c) 41 - 48 hours	85 100 (14.5%)	17 300 (10.1%)	162 800 (18.2%)	14 600 (12.1%)	279 800 (15.8%)	5 433 575 (19.4%)
d) 49 - 59 hours	59 200 (10.1%)	8 400 (4.9%)	107 800 (12.0%)	7 400 (6.1%)	182 800 (10.3%)	3 277 915 (11.7%)
e) 60 hours or more	129 000 (22.0%)	7 400 (4.3%)	156 200 (17.4%)	6 500 (5.4%)	299 100 (16.8%)	2 955 070 (10.6%)

(continued)

Table 3.5-1
Employment Characteristics of Heads of Eligible Families in Each of 4 Family Profiles, for All Eligible Families, and for Heads of All Families in the United States

CHARACTERISTICS	FAMILY PROFILE TYPE				ALL ELIGIBLE FAMILIES (2 263 500 Families)	ALL FAMILIES IN THE UNITED STATES (51 168 599 Families)
	POOR		NEAR-POOR			
	Both Spouses Present (705 600 Families)	Single Parent (365 700 Families)	Both Spouses Present (1 028 400 Families)	Single Parent (163 800 Families)		
6. Class of Worker						
a) Private Co. Employee, etc.	441 600 (62.6%)	249 700 (68.3%)	699 600 (68.0%)	119 400 (72.9%)	1 510 300 (66.7%)	31 857 243[g] (62.3%)
b) Fed. Government	35 600 (5.0%)	8 900 (2.4%)	84 400 (8.2%)	7 600 (4.6%)	136 500 (6.0%)	2 126 347 (4.2%)
c) State Government	20 200 (2.9%)	10 300 (2.8%)	33 300 (3.2%)	7 200 (4.4%)	71 000 (3.1%)	1 439 332 (2.8%)
d) Local Government	25 500 (3.6%)	14 600 (4.0%)	44 000 (4.3%)	9 300 (5.7%)	93 400 (4.1%)	2 777 922 (5.4%)
e) Self Employed	168 600 (23.9%)	13 900 (3.8%)	163 700 (15.9%)	8 000 (4.9%)	354 200 (15.6%)	4 800 991 (9.4%)
f) Working without pay	3 300 (0.5%)	2 000 (0.5%)	1 000 (0.1%)	400 (0.2%)	6 700 (0.3%)	67 275 (0.1%)
g) NA, etc.[e]	10 800 (1.5%)	66 300 (18.1%)	2 400 (0.2%)	11 900 (7.3%)	91 400 (4.0%)	8 099 489 (15.8%)
7. Type of Occupation						
a) Professional–Technical	35 600 (5.0%)	14 800 (4.0%)	54 500 (5.3%)	9 000 (5.5%)	113 900 (5.0%)	5 968 306[c] (11.7%)
b) Managers & Administrators	34 200 (4.8%)	6 000 (1.6%)	59 700 (5.8%)	5 000 (3.1%)	104 900 (4.6%)	4 973 564 (9.7%)
c) Sales Workers	17 500 (2.5%)	13 600 (3.7%)	39 800 (3.9%)	6 300 (3.8%)	77 200 (3.4%)	2 831 394 (5.5%)
d) Clerical	17 600 (2.5%)	41 900 (11.5%)	39 000 (3.8%)	26 700 (16.3%)	125 200 (5.5%)	3 517 227 (6.9%)
e) Craftsmen	128 100 (18.2%)	10 700 (2.9%)	238 300 (23.2%)	8 100 (4.9%)	385 200 (17.0%)	8 937 824 (17.5%)
f) Operatives (Not Transp)	109 500 (15.5%)	57 200 (15.6%)	189 200 (18.4%)	39 200 (23.9%)	395 100 (17.5%)	5 546 251 (10.8%)
g) Transport Operatives	58 200 (8.2%)	4 200 (1.1%)	92 900 (9.0%)	3 800 (2.3%)	159 100 (7.0%)	2 351 028 (4.6%)
h) Non-farm Labor	83 700 (11.9%)	7 900 (2.2%)	88 200 (8.6%)	4 400 (2.7%)	184 200 (8.1%)	2 031 079 (4.0%)
i) Farmers/Farm Managers	100 300 (14.2%)	4 100 (1.1%)	73 000 (7.1%)	3 600 (2.2%)	181 000 (8.0%)	1 204 643 (2.4%)
j) Farm Laborers	56 000 (7.9%)	12 900 (3.5%)	41 600 (4.0%)	2 400 (1.5%)	112 900 (5.0%)	485 796 (0.9%)
k) Service Workers– NP Not Private	34 700 (4.9%)	90 100 (24.6%)	54 300 (5.3%)	37 200 (22.7%)	216 300 (9.6%)	3 122 464 (6.1%)
l) Private Household Service	200 (.0%)	33 700 (9.2%)	100 (.0%)	4 400 (2.7%)	38 400 (1.7%)	201 633 (0.4%)
m) NA, etc.[f]	30 000 (4.3%)	68 600 (18.8%)	57 800 (5.6%)	13 700 (8.4%)	170 100 (7.5%)	9 997 390 (19.5%)

(continued)

Table 3.5-1

Employment Characteristics of Heads of Eligible Families in Each of 4 Family Profiles, for All Eligible Families, and for Heads of All Families in the United States.

CHARACTERISTICS	FAMILY PROFILE TYPE				ALL ELIGIBLE FAMILIES (2 263 500 Families)	ALL FAMILIES IN THE UNITED STATES (51 168 599 Families)
	POOR		NEAR-POOR			
	Both Spouses Present (705 600 Families)	Single Parent (365 700 Families)	Both Spouses Present (1 028 400 Families)	Single Parent (163 800 Families)		
B. Type of Industry						
a) Agriculture, Forestry, Fisheries	168 000 (23.8%)	20 100 (5.5%)	130 200 (12.7%)	7 100 (4.3%)	325 400 (14.4%)	1 988 141[d] (3.9%)
b) Mining	18 100 (2.6%)	1 400 (0.4%)	25 400 (2.5%)	700 (0.4%)	45 600 (2.0%)	530 714 (1.0%)
c) Construction	88 500 (12.5%)	4 900 (1.3%)	131 300 (12.8%)	4 600 (2.8%)	229 300 (10.1%)	3 830 687 (7.5%)
d) Manufacturing	162 600 (23.0%)	64 600 (17.7%)	288 300 (28.0%)	45 000 (27.5%)	560 500 (24.8%)	12 558 643 (24.5%)
e) Transportation	41 900 (5.9%)	8 100 (2.2%)	68 000 (6.6%)	4 700 (2.9%)	122 700 (5.4%)	3 539 421 (6.9%)
f) Wholesale and Retail Trade	94 200 (13.4%)	75 200 (20.6%)	162 800 (15.8%)	34 200 (20.9%)	366 400 (16.2%)	7 069 978 (13.8%)
g) Finance, Insurance, Real Estate	6 200 (0.9%)	6 500 (1.8%)	12 800 (1.2%)	4 700 (2.9%)	30 200 (1.3%)	1 762 059 (3.4%)
h) Business and Repair Services	21 900 (3.1%)	3 700 (1.0%)	31 600 (3.1%)	2 200 (1.3%)	59 400 (2.6%)	1 400 380 (2.7%)
i) Personal Services	10 800 (1.5%)	53 000 (14.5%)	15 900 (1.5%)	12 400 (7.6%)	92 100 (4.1%)	1 055 214 (2.1%)
j) Entertainment Recreation	4 400 (0.6%)	2 500 (0.7%)	5 400 (0.5%)	1 100 (0.7%)	13 400 (0.6%)	271 787 (0.5%)
k) Professional and Related Services	42 300 (6.0%)	51 300 (14.0%)	60 400 (5.9%)	27 700 (16.9%)	181 700 (8.0%)	4 491 135 (8.8%)
l) Public Administration	16 700 (2.4%)	5 800 (1.6%)	38 500 (3.7%)	5 700 (3.5%)	66 700 (2.9%)	2 673 050 (5.2%)
m)NA, etc.	30 000 (4.3%)	68 600 (18.8%)	57 800 (5.6%)	13 700 (8.4%)	170 100 (7.5%)	9 997 390 (19.5%)

[a]U.S. Bureau of the Census, Census of Population: 1970, Vol I, *Characteristics of the Population*, Part I, United States Summary – Section 2, Table 262, pp. 1-998.

[b]These figures are based on 50,359,505 family heads in the civilian labor force. Comparable figures could not be found for heads of families in the Armed Forces.

[c]*Characteristics of the Population*, Table 255, pp. 1-942.

[d]*Characteristics of the Population*, Table 256, pp. 1-951.

[e]NA refers to person who never worked or persons not in the labor force who either did not report the year they last worked or who last worked in 1959 or earlier. See *Documentation*, Concept 97, page 154, and variable P31, page 74.

[f]See footnote e above and *Documentation*, Concept 95, pages 152-153.

[g]U.S. Bureau of the Census, Census of Population: 1970, *Subject Reports, Final Report PC(2)-9A, Low-Income Population*, Table 25, p. 257.

[h]Computed from U.S. Bureau of the Census, Census of Population: 1970, *Subject Reports, Final Report PC(2)-6A, Employment Status and Work Experience*, Table 17, p. 202.

3.5.1 Employment Status of Family Heads

At the time the 1970 Census was conducted 80% of the heads of all families in the United States were classified as employed, 2.1% were unemployed, and 17.9% were classified as not in the labor force. Among all eligible families 83.3% of family heads were employed (3.3% higher than in the nation), 4.1% were unemployed (2% higher than in the nation), and 12.6% (5.3% lower than the national rate) were classified as not in the labor force. In terms of employment status in 1969 the heads of eligible families do not appear to have been drastically different from the heads of all families in the nation.

Examining the number of weeks worked by family heads during 1969 we find that in the nation as a whole 14.4% of family heads had not worked at all, while only 9.8% of the heads of eligible families had not worked at all. The percentage of heads of eligible families not working at all during 1969 was substantially lower than the national rate in the both-spouses-present family profiles: 6.1% among poor families and only 1.2% among near poor families. The heads of poor single-parent families (over 92% of whom were female[19] had an overwhelming rate of 39.3% who had not worked at all during 1969.[20] On the other hand, 57.9% of the heads of eligible families had worked at least 50 weeks out of the year, although this is a somewhat lower percentage than the 64.7% of all family heads in the nation who had worked for at least 50 weeks during 1969.

Among the national population of employed family heads only 2.3% had not been at work at all during the reference week,[21] while 13.1% of the employed heads of eligible families had not been at work during that week. Within the four profiles of eligible families heads of single-parent families, especially those below the poverty line, had a noticably higher percentage employed but not at work during the reference week.

---

[19] See Table 3.3-1.

[20] An interesting question (which we unfortunately cannot answer with data currently available) is whether the increase in the implementation and availability of day care for children in the last few years has reduced this figure.

[21] The reference week was the full week prior to the day the Census data were collected. See Documentation, Concepts 88 through 90, page 151-152.

When we examined the number of hours worked by employed family heads during the reference week we found that 43% of the heads of eligible families had worked more than 40 hours, very nearly the same as the 42% among all family heads in the nation. Within the four profiles of eligible families there were pronounced differences in the percentages of family heads working over 40 hours during the reference week. About 47% of the heads of two-spouse families had worked over 40 hours whereas only about 21% of the heads of single-parent families had worked that many hours. The most striking information regarding the number of hours worked is that nearly 17% of the heads of eligible families had worked 60 hours or more during the reference week (compared to about 11% of family heads in the nation). Within the four profiles of eligible families, 22% of the heads of poor two-spouse families had worked 60 hours or more and over 17% of the heads of near-poor two-spouse families had worked that many hours. Again, a very small percentage (about 5%) of heads of single-parent families had worked over 60 hours during the reference week. Figure 3.5-1 on the following page graphically depicts the percentages of family heads who had worked more than 40 hours and more than 60 hours during the reference week.

3.5.2 Type of Employment of Family Heads

Referring again to Table 3.5-1, a large majority (66.7%) of heads of eligible families were employees of private companies, about the same as in the national population. Over 13%, however, were employees of Federal, State or local governments. About 16% were classified as self-employed, some 6% higher than in the national population. Among heads of eligible families, about 6% less than among the national population of family heads were in professional, technical and kindred occupations, and the same is true regarding occupations classified as managerial or administrative. The percentage of heads of eligible families working as operatives and laborers (both farm and non-farm) was higher than among the national population. For single heads of families there was a pronounced over-representation of heads of eligible families in occupations classified as non-private household service workers (about 24% in the eligible population as compared to 6% in the national population). Among

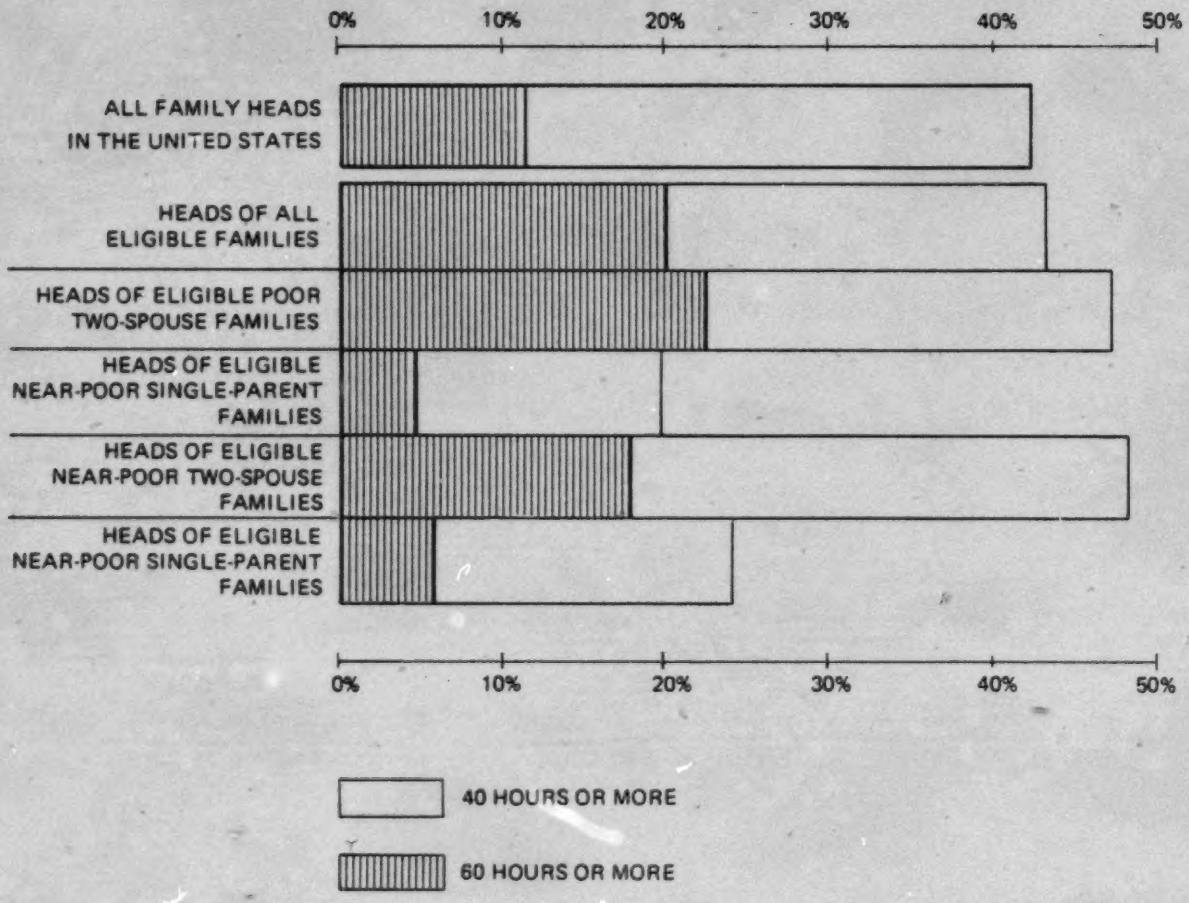


Figure 3.5-1

Percent of Family Heads at Work During the Reference Week for the 1970 Census Who Worked 40 Hours or More and 60 Hours or More During the Reference Week, by All Family Heads in the United States, Heads of All Eligible Families, and each Family Profile

poor families with both spouses present there was a heavy over-representation in the farmers/farm-managers classification, where 14.2% of such heads of eligible families were classified compared to only 2.4% in the national population.

When we considered the type of industry in which the heads of eligible families were employed there are few dramatic differences between heads of eligible families and others. As would be expected since eligible families reside in essentially rural areas, the most pronounced difference was that over 14% of the heads of all eligible families were in agriculture, forestry and fisheries industries, while only about 4% of the national population of family heads were in these industries. Among the eligible families we found an especially heavy concentration (nearly 24%) of the heads of poor families with both spouses present in these industries.

3.6 Income Characteristics of Eligible Families and Family Heads by Four Profiles

In this section we discuss the income characteristics of eligible families and heads of eligible families during 1969, the reference year for the 1970 Census. The discussion is based on the data in Table 3.6-1 on the following page.

3.6.1 Family Income

Table 3.6-1 indicates that the average total family income from all sources (including welfare) for all families in the United States was $10,999 per family in 1969. During the same year, eligible families had an average total income of only $3,845. Among the four family profiles, poor families were substantially worse off, with single-parent poor families having an average total income of only $1,742 from all sources and two-spouse poor families at an average of $2,543 for the year. Near-poor families had approximately one-half the national average for total family income with $5,399 and $4,387 average total incomes for two-spouse and single-parent families respectively.

Table 3.6-1

Income Characteristics of Eligible Families and Heads of Eligible Families in Each of 4 Family Profiles, for All Eligible Families, and for Heads of All Families in the United States

CHARACTERISTICS	FAMILY PROFILE TYPE				ALL ELIGIBLE FAMILIES (2 263 500 Families)	ALL FAMILIES IN THE UNITED STATES (51 168 599 Families)
	POOR		NEAR-POOR			
	Both Spouses Present (705 600 Families)	Single Parent (365 700 Families)	Both Spouses Present (1 028 400 Families)	Single Parent (163 800 Families)		
1. Average Total Family Income for 1969	$2,543	$1,742	$5,399	$4,387	$3,845	$10,999[a]
2. Average Income per Family Member	$ 502	$ 407	$1,069	$1,131	$ 794	$ 3,092[a]
3. Average Total Income from all Sources for Heads in 1969	$2,134	$1,463	$4,725	$3,628	$3,301	$ 8,536[b]
4. Average, Head's Total Income from all Sources as Percent of Family's Total Income	84%	84%	88%	83%	86%	77%[b]
5. Average Total *Earnings* for Heads in 1969	$2,040	$ 814	$4,619	$2,742	$3,064	$4,363[c]
6. Average, Head's Total *Earnings* as Percent of Family's Total Income	80%	47%	86%	63%	80%	69%[c]
7. Average Income for Heads from Social Security and Railroad Retirement	$ 11	$ 141	$ 18	$ 347	$ 55	NA[d]
8. Average Income for Heads from Public Assistance and Welfare	$ 33	$ 364	$ 19	$ 195	$ 87	NA[d]
9. Average Income for Heads from all Other Sources	$ 50	$ 144	$ 69	$ 344	$ 95	NA[d]

[a]U.S. Bureau of the Census, Census of Population: 1970, *General Social and Economic Characteristics*, Final Report, PC(1)-C1, United States Summary, Table 94, pp. 1-398.

[b]Computed from U.S. Bureau of the Census, Census of Population: 1970, *Detailed Characteristics*, Final Report, PC(1)-D1, United States Summary, Table 248, p. 844 and Table 250, p. 873.

[c]Computed from U.S. Bureau of the Census, Census of Population: 1970, *Subject Reports*, Final Report PC(2)-8A, Table 8, p. 341; and Final Report PC(2)-9A, Table 27, p. 280.

[d]These data are not available in published Census documents in a form sufficiently comparable to be useful.

If we translate total family income from all sources into total income per family member the data are even more dismal for the eligible families. For all families in the United States the average total income per family member was $3,092. Poor families had averages of $502 and $407 per family member for two-spouse and single-parent families respectively. In fact, the average total family income for poor families was substantially less (by about $500) than the national average income per family member. Among near-poor families, the average per family member income of approximately $1,100 was only about one-third the national average.

3.6.2 Income of Family Heads

Referring again to Table 3.6-1 we turn to an examination of the amount and sources of income for heads of eligible families.

The average income from all sources for heads of eligible families was $3,301 in 1969, compared to $8,536 for the national population of family heads. Among the four profiles of eligible families, we found the same rank-ordering for incomes of heads of families as was found for average total family income. Among all eligible families, the total income of family heads accounted for 86% of the total income for the family, while in the national population it accounted for 9% less, at 77% of the total family income.

When we considered only the earnings[22] of the heads of families we found an interesting phenomenon. Heads of eligible families had earned an average of $3,064 during 1969, which accounted for 80% of the total family income from all sources. Among the total national population, however, heads of families had earned an average of $4,363 during 1969 -- only $1,299 more than heads of eligible families. Further, the $4,363 average earned by heads of all families in the nation accounted for only 69% of their families' total income from all sources -- some 11% less than among the eligible population of families. There were also striking

---

[22] See Documentation, Variables P37, P40 and P43; page 75, and Concept 104, pages 155-156. Earnings are from all jobs (wages, salaries, bonuses, commissions and tips), and from farm and non-farm business, professional practices and partnerships.

differences among the four profiles of eligible families, both in terms of gross dollar amounts and in heads' earnings as a percentage of family income from all sources. The heads of poor single-parent families earned an average of only $814 during 1969, approximately 47% of the families' total income from all sources. The heads of poor two-spouse families earned an average of $2,040, which was about 80% of total family income. Among near-poor families, single-parent heads earned an average of $2,742 or about 63% of the total family income. Heads of two-spouse families on the average earned $4,619 in 1969, which was 86% of the total family income from all sources.

Income for heads from sources other than earnings is broken out by income from Social Security and railroad retirement, public assistance and welfare, and income from all other sources. Among all eligible families the income for heads from Social Security and railroad retirement amounts to an average of $55 in 1969. Single heads were higher on the scale, with poor single heads averaging $141 and near-poor heads averaging $347 from this source of income.

The heads of all eligible families received an average income for the year of $87 during 1969 from public assistance and welfare. Again, the heads of two-spouse families received very little income from welfare: $33 for poor heads and $19 for near-poor heads. Single heads received more income from welfare sources, with poor single heads receiving $364 on the average and near-poor single heads receiving an average of $195. Over all eligible families, the income received by family heads from welfare sources amounted to an average of 2.3% of the total family income.

In addition to the above sources of income, heads of eligible families received an average of $95 during 1969 from all other sources. "Other sources" includes interest, dividends, veterans' payments, pensionsn insurance benefits, alimony and child support, etc.[23] Again, heads of two-spouse families received very little from this category of income ($50 for poor; $69 for near-poor). Poor single heads received $144 and near-poor single heads received an average of $344.

---

[23]See Documentation, Concept 104.23, page 156 for the complete Census definition of the term.

CHAPTER FOUR

THE ECONOMIC DEVELOPMENT REGIONS AND THE ELIGIBLE POPULATION

In Chapter Three we presented a characterization of the eligible population, classified into four family profiles and for the United States as a whole. In this chapter we describe the eligible population in terms of the same set of characteristics used in the preceding chapter: demographics, housing conditions and costs, employment, and income. We shall not, however, group the eligible population into the four family profiles previously used.

Because the purpose of this report is to characterize and quantify the population of families potentially eligible for family-based residential career education programs similar to Mountain-Plains, we will group the eligible population according to geographic areas in the nation. Since the size and characteristics of the eligible population may vary considerably among various areas of the United States such a breakdown of the information presented earlier should be useful were replication of the Mountain-Plains program to be considered in other regions of the nation. Since funding of the Mountain-Plains Program has been considered by the Old West Economic Development Region, the geographic areas by which the eligible population is grouped in this chapter are the U.S. Department of Commerce Economic Development Regions.

The eight Economic Development Regions (EDRs) and the states that comprise them are listed below and displayed in the map in Figure 4.0-1 on the following page. We have had to approximate the geographic boundaries of some of the EDRs because they do not coincide with state boundaries. We were constrained by the fact that in the state-based Public Use Sample tapes used to generate the data for this report the smallest identifiable geo-political unit is the state. The trade-offs involved in approximating the boundaries of the EDRs involved are discussed below, and the approximated geographic boundaries upon which the following

p. 48 blank

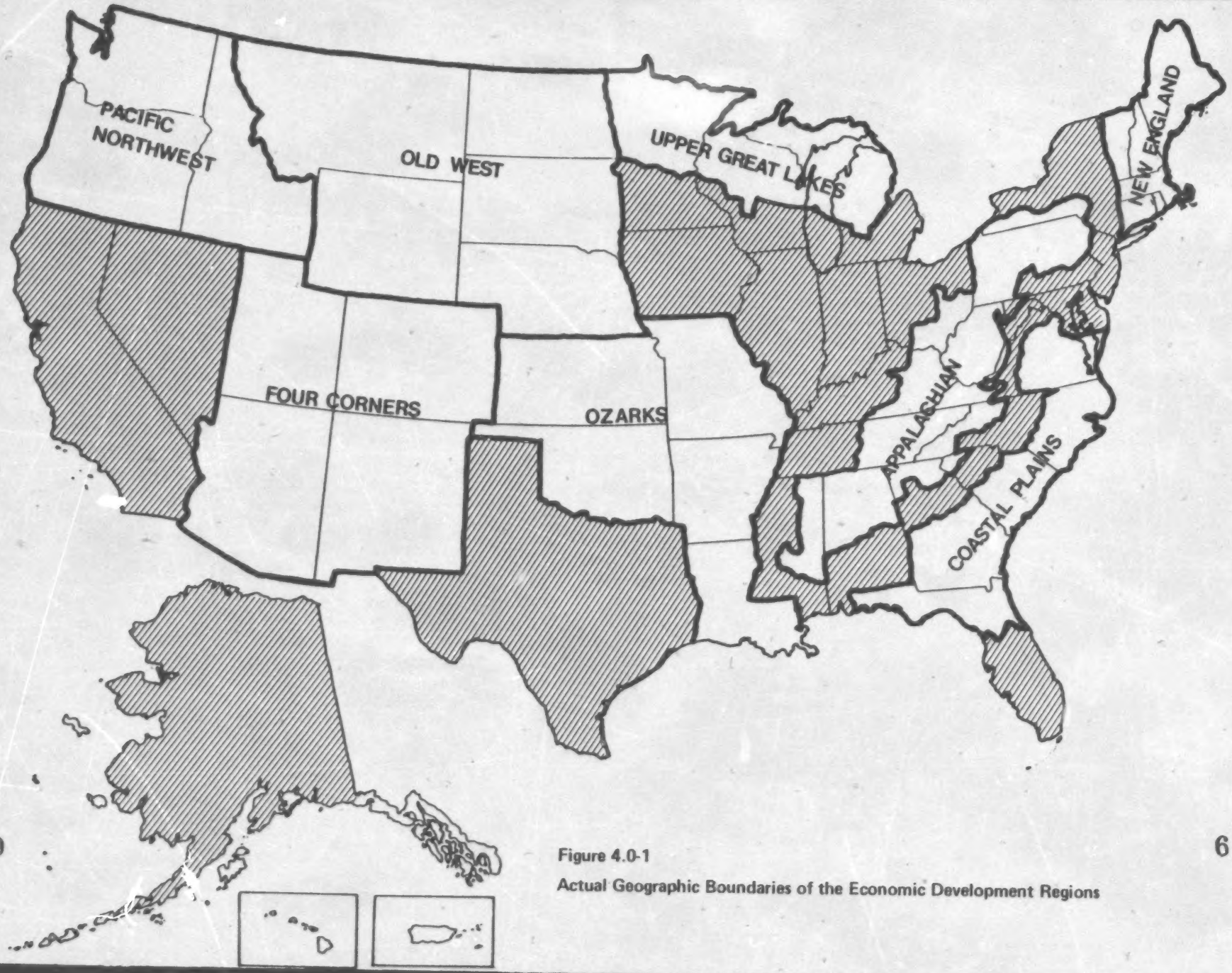


Figure 4.0-1

Actual Geographic Boundaries of the Economic Development Regions

data are based are displayed in Figure 4.0-2 below. The Economic Development Regions and their geographic boundaries (actual and as approximated in this report) are:

(1) Pacific Northwest: includes all of Idaho, Oregon and Washington. No boundary approximation is involved.

(2) Old West: includes all of Montana, Wyoming, Nebraska, North Dakota and South Dakota. No boundary approximation is involved.

(3) Four Corners: includes all of Arizona, Colorado, New Mexico and Utah. No boundary approximation is involved.

(4) Ozarks: includes all of Arkansas, Kansas, Louisiana, Missouri and Oklahoma. No boundary approximation is involved.

(5) New England: includes all of Connecticut, Maine, Massachusetts, New Hampshire, Vermont, and Rhode Island.

Rhode Island is not included in this report because the confidentiality of data restrictions on Census data permits neither the urban/rural nor the metropolitan/non-metropolitan distinction necessary to identify rural families for the eligible population. We felt the state to be sufficiently urban in nature that its exclusion would not greatly under-estimate the number of eligible families in the New England EDR, nor would its exclusion change the general characteristics of the eligible population in New England.

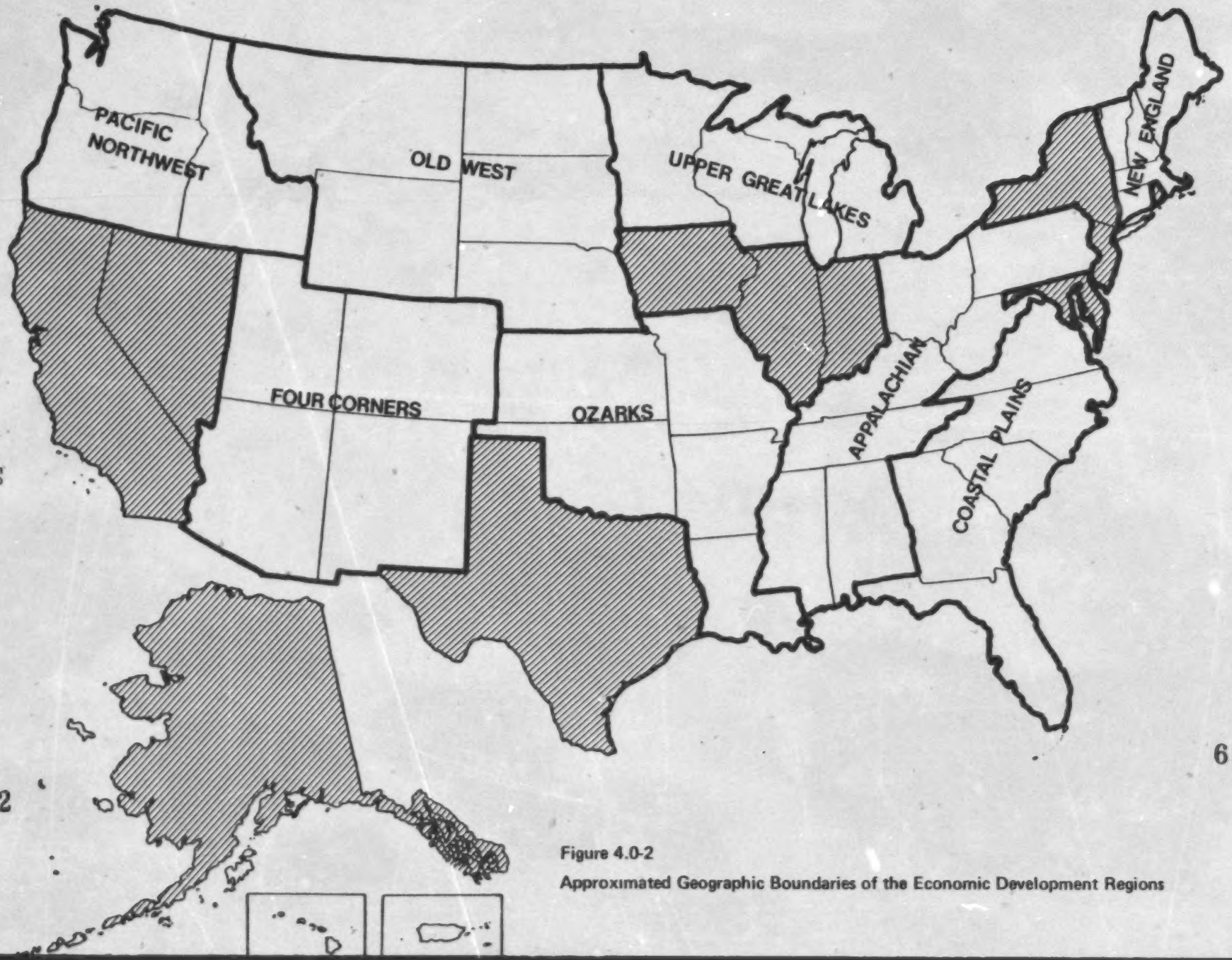
(6) Upper Great Lakes: includes approximately the northern two-thirds of Michigan, Minnesota and Wisconsin.

The boundaries of this EDR were approximated by including all three states in their entirety on the assumption that the southern parts of these states, being primarily metropolitan in nature, are essentially excluded by the rural place of residence criteria for eligible families.

(7) Appalachian: includes parts of Mississippi, Alabama, Georgia, South Carolina, North Carolina, Tennessee, Kentucky, Virginia, West Virginia, Ohio, Pennsylvania, Maryland, and New York.

In order to approximate the eligible population in the Appalachian EDR, several trade-offs were necessary to balance parts of states. We included all of Mississippi, Alabama, Tennessee, Kentucky, West Virginia, Maryland, North Carolina, South Carolina and Georgia.

(8) Coastal-Plains: includes parts of Florida, Georgia, North Carolina, South Carolina, and Virginia.



52

62

63

Figure 4.0-2

Approximated Geographic Boundaries of the Economic Development Regions

In order to approximate the eligible population in the Coastal-Plains EDR we included all of Florida, Georgia, North Carolina, South Carolina and Virginia.

Table 4.0-1 below shows the distribution of eligible families across the Economic Development Regions classified by poverty status (poor and near-poor) and family structure (two-spouse and single-parent) at the time the 1970 Census was conducted. The Appalachian and Coastal-Plains EDRs had the largest numbers of eligible families (531,300 and 432,500 families respectively), accounting for 42.6% of the total eligible population. The Ozarks EDR contained another 293,700 families (13% of the eligible population), while the Upper Great Lakes EDR had 157,800 eligible families equalling about 7% of the eligible population. The remaining four EDRs had roughly equal numbers of eligible families: Old West, 104,600 families; Four Corners, 91,700 families, New England, 87,700; and Pacific Northwest, 82,200 families. Approximately 80% (or 1,781,500) of all eligible families were living within the boundaries of the eight Economic Development Regions.

Examining Table 4.0-1 we found that the EDRs were quite similar to each other and to the total eligible population in terms of the percentage distributions of poor and near-poor families (about 47% and 53% respectively for all eligible families). Neither are the EDRs appreciably different from each other, or the total population of eligible families, in terms of the percentage distribution of single-parent eligible families. Among all eligible families 23.4% had single heads, while among the EDRs Old West had the lowest (17.6%) and New England had the highest with 27.6%.

The preceding brief characterization of the Economic Development Regions in terms of their numbers and percentage distributions of poor/near-poor and two-spouse/single-parent families has been presented to provide some comparability with the national level data used to create the four family profiles used to structure the presentation of the data in Chapter Three.

In the following sections of this chapter we present a description of the eligible families in each Economic Development Region using the

Table 4.0-1

Number and Percent of the Eligible Population in Each Economic Development Region, and in the United States by Selected Categories of Poverty Status and Family Type

ECONOMIC DEVELOPMENT REGIONS	POVERTY STATUS		FAMILY TYPE				ALL ELIGIBLE FAMILIES	
	POOR	NEAR-POOR	Husband & Wife Present	Single Parent Families				
				Total	Female Head	Male Head		
	n (% of eligible families in region)	n (% of eligible families in region)	n (% of eligible families in region)	n (% of eligible families in region)	n (% of eligible families in region)	n (% of eligible families in region)	n (% of eligible families in region)	% of all eligible families in U.S.
Pacific Northwest	38 200 (46.5%)	44 000 (53.5%)	59 900 (72.9%)	22 300 (27.1%)	20 400 (24.8%)	1 900 (2.3%)	82 200 (100%)	3.6%
Old West	48 800 (46.7%)	55 800 (53.3%)	86 200 (82.4%)	18 400 (17.6%)	15 900 (15.2%)	2 500 (2.4%)	104 600 (100%)	4.6%
Four Corners	43 000 (46.9%)	48 700 (53.1%)	70 100 (76.4%)	21 600 (23.6%)	19 400 (21.2%)	2 200 (2.4%)	91 700 (100%)	4.1%
Upper Great Lakes	66 800 (42.3%)	91 000 (57.7%)	126 400 (80.1%)	31 400 (19.9%)	28 100 (17.8%)	3 300 (2.1%)	157 800 (100%)	7.0%
Ozarks	146 400 (49.8%)	147 300 (50.2%)	232 700 (79.2%)	61 000 (20.8%)	53 900 (18.4%)	7 100 (2.4%)	293 700 (100%)	13.0%
New England	36 300 (41.4%)	51 400 (58.6%)	63 500 (72.4%)	24 200 (27.6%)	22 800 (26.0%)	1 400 (1.6%)	87 700 (100%)	3.9%
Appalachian	260 200 (49.0%)	271 100 (51.0%)	411 700 (77.5%)	119 600 (22.5%)	105 300 (19.8%)	14 300 (2.7%)	531 300 (100%)	23.5%
Coastal Plains	202 500 (46.8%)	230 000 (53.2%)	319 000 (73.8%)	113 500 (26.3%)	100 300 (23.2%)	13 200 (3.1%)	432 500 (100%)	19.1%
ALL ELIGIBLE FAMILIES IN THE UNITED STATES	1 071 300 (47.3%)	1 192 200 (52.7%)	1 734 000 (76.6%)	529 500 (23.4%)	472 400 (20.9%)	57 100 (2.5%)	2 263 500 (100%)	100%

same characteristics employed to describe the eligible population on a national basis in Chapter Three. The size of the state-based Public Use Sample is not, however, large enough to allow us to disaggregate the regional descriptions by the four family profiles used at the national level. The characterization of the eligible population in the EDRs will, therefore, refer only to the total eligible population of families within each EDR.

4.1 Demographic Characteristics of Eligible Families by Economic Development Regions

Table 4.1-1 presents the basic demographic characteristics of eligible families in 1970 by Economic Development Regions (EDRs), all eligible families, and all families in the United States.

4.1.1 Ethnicity of Family Head

As would be expected, the ethnic composition of the eligible population varied substantially among the eight EDRs. The Ozarks, Appalachian and Coastal-Plains regions had the highest percentages of black family heads with 17.1%, 15.2% and 34.7% respectively. The Pacific Northwest and Old West regions each had about 1/2 of 1% black family heads, and Four Corners and Upper Great Lakes each had about 1.5% black heads. On the other hand, Old West and Four Corners had the highest percentages of American Indians with 4.7% and 7.2% respectively, and Four Corners also had by far the highest percentage (21.8%) of heads of Spanish descent.

4.1.2 Age of Family Head

The age distributions of family heads among the EDRs were not dramatically different from each other, or from the age distribution of the total eligible population. The Pacific Northwest and Four Corners did, however, have a somewhat younger eligible population than the other EDRs, with 40.6% and 38.3% of family heads between the ages of 18 and 29. Among the total eligible population about 33.6% of family heads were in this age range.

Table 4.1-1

Basic Demographic Characteristics of the Eligible Population of Families in Each of 8 Economic Development Regions, for All Eligible Families, and for All Families in the United States

CHARACTERISTICS	ECONOMIC DEVELOPMENT REGIONS								All Eligible Families (2 263 500 Families)	All Families in U.S. (51 168 999 Families)
	Pacific Northwest (82 200 Families)	Old West (104 600 Families)	Four Corners (91 700 Families)	Upper Great Lakes (157 800 Families)	Ozarks (293 700 Families)	New England (87 700 Families)	Appalachian (531 300 Families)	Coastal Plains (432 500 Families)		
1. Race of Family Head (number and percent in profile)										
a) White	79 600 (96.8%)	99 200 (94.8%)	82 800 (90.3%)	154 500 (97.9%)	238 800 (81.3%)	(86 500) (98.6%)	449 800 (84.7%)	279 500 (64.6%)	1 908 800 (84.3%)	45 770 351[a] (89.5%)
b) Black	500 (0.6%)	500 (0.5%)	1 400 (1.5%)	2 200 (1.4%)	50 200 (17.1%)	700 (0.8%)	80 600 (15.2%)	149 900 (34.7%)	324 900 (14.4%)	4 863 401 (9.5%)
c) American Indian	1 400 (1.7%)	4 900 (4.7%)	6 600 (7.2%)	1 000 (0.6%)	4 200 (1.4%)	400 (0.5%)	300 (0.1%)	2 700 (0.6%)	24 700 (1.1%)	534 847 (1.0%)
d) Other	700 (0.9%)	0 0	900 (1.0%)	100 (0.1%)	500 (0.2%)	100 (0.2%)	600 (0.1%)	400 (0.1%)	5 100 (0.2%)	
2. Family Head of Spanish Descent										
a) Yes	2 800 (3.4%)	2 100 (2.0%)	20 000 (21.8%)	3 200 (2.0%)	5 500 (1.9%)	500 (0.6%)	5 300 (1.0%)	4 900 (1.1%)	83 200 (3.7%)	2 039 085[a] (4.0%)
b) No	79 400 (96.6%)	102 500 (98.0%)	71 700 (78.2%)	154 600 (98.0%)	288 200 (98.1%)	87 200 (99.4%)	526 000 (99.0%)	427 600 (98.9%)	2 180 300 (96.3%)	49 129 514 (96.0%)
3. Age of Family Head										
a) 18 - 19	2 800 (3.4%)	2 100 (2.0%)	2 700 (2.9%)	3 300 (2.1%)	7 000 (2.4%)	1 500 (1.7%)	10 400 (2.0%)	8 600 (2.0%)	50 000 (2.2%)	310 084[f] (1.0%)
b) 20 - 24	15 200 (18.5%)	15 100 (14.4%)	15 900 (17.3%)	17 700 (11.2%)	48 700 (16.6%)	12 900 (14.7%)	78 500 (14.8%)	64 300 (14.9%)	342 700 (15.1%)	3 231 759 (10.6%)
c) 25 - 29	15 400 (18.7%)	15 400 (14.7%)	16 600 (18.1%)	22 900 (14.5%)	47 900 (16.3%)	14 900 (17.0%)	90 100 (17.0%)	74 400 (17.2%)	378 000 (16.7%)	5 293 681 (17.3%)
d) 30 -34	14 200 (17.3%)	19 800 (18.9%)	18 100 (19.7%)	33 200 (21.0%)	57 300 (19.5%)	20 100 (22.9%)	100 000 (18.8%)	85 500 (19.8%)	442 100 (19.5%)	5 165 689 (16.9%)
e) 35 - 39	14 400 (17.5%)	17 700 (16.9%)	16 600 (18.1%)	30 400 (19.3%)	52 600 (17.9%)	16 600 (18.9%)	100 300 (18.9%)	81 600 (18.9%)	418 300 (18.5%)	5 225 126 (17.1%)
f) 40 - 44	11 900 (14.5%)	19 200 (18.4%)	13 400 (14.6%)	29 900 (18.9%)	42 800 (14.6%)	12 700 (14.5%)	86 900 (16.4%)	65 400 (15.1%)	357 300 (15.8%)	5 661 519 (18.5%)
g) 45 - 49	8 300 (10.1%)	15 300 (14.6%)	8 400 (9.2%)	20 400 (12.9%)	37 400 (12.7%)	9 000 (10.3%)	65 100 (12.3%)	52 700 (12.2%)	275 100 (12.2%)	5 694 035 (18.6%)

(continued)

Table 4.1-1

Basic Demographic Characteristics of the Eligible Population of Families in Each of 8 Economic Development Regions, for All Eligible Families, and for All Families in the United States

CHARACTERISTICS	ECONOMIC DEVELOPMENT REGIONS								All Eligible Families (2 263 500 Families)	All Families in U.S. (51 168 599 Families)
	Pacific Northwest (82 200 Families)	Old West (104 600 Families)	Four Corners (91 700 Families)	Upper Great Lakes (157 800 Families)	Ozarks (293 700 Families)	New England (87 700 Families)	Appalachian (531 300 Families)	Coastal Plains (432 500 Families)		
4. Education of Family Head										
a) 6 - 8	8 800 (10.7%)	20 200 (19.3%)	12 100 (13.2%)	28 600 (18.1%)	58 700 (20.0%)	13 600 (15.5%)	133 400 (25.1%)	104 900 (24.3%)	460 300 (20.3%)	13 644 320[a,c] (26.7%)
b) 9 - 11	11 700 (14.2%)	12 300 (11.8%)	14 200 (15.5%)	23 700 (15.0%)	51 100 (17.4%)	13 900 (15.8%)	103 400 (19.5%)	96 900 (22.4%)	414 100 (18.3%)	9 943 865 (19.4%)
c) 12	41 400 (50.4%)	54 700 (52.3%)	42 600 (46.5%)	85 100 (53.9%)	145 400 (49.5%)	46 900 (53.5%)	247 800 (46.6%)	193 200 (44.7%)	1 102 600 (48.7%)	15 233 381 (29.8%)
d) More than 12	20 300 (24.7%)	17 400 (16.6%)	22 800 (24.9%)	20 400 (12.9%)	38 500 (13.1%)	13 300 (15.2%)	46 700 (8.8%)	37 500 (8.7%)	286 500 (12.7%)	12 347 033 (24.1%)
5. Sex of Family Head (number and percent in profile):										
a) Male	61 800 (75.2%)	88 700 (84.8%)	72 300 (78.8%)	129 700 (82.2%)	239 800 (81.6%)	64 900 (74.0%)	426 000 (80.2%)	332 200 (76.8%)	1 791 100 (79.1%)	45 629 526[c] (89.2%)
b) Female	20 400 (24.8%)	15 900 (15.2%)	19 400 (21.2%)	28 100 (17.8%)	53 900 (18.4%)	22 800 (26.0%)	105 300 (19.8%)	100 300 (23.2%)	472 400 (20.9%)	5 539 073 (10.8%)
6. Does Family Head Have a Disability Limiting Work?										
a) Yes	10 700 (13.0%)	7 800 (7.5%)	7 200 (7.9%)	15 000 (9.5%)	27 100 (9.2%)	7 200 (8.2%)	46 200 (8.7%)	35 900 (8.3%)	196 700 (8.7%)	(6.9%)[d]
b) No	71 500 (87.0%)	96 800 (92.5%)	84 500 (92.1%)	142 800 (90.5%)	266 600 (90.8%)	80 500 (91.8%)	485 100 (91.3%)	396 600 (91.7%)	2 066 800 (91.3%)	(93.1%)
7. Average Number of Persons in a Family	4.67	4.82	4.78	5.25	4.70	4.84	4.88	4.86	4.84	3.56[e]
8. Average Number of Related Children Under 18 Years in a Family	2.81	2.83	2.83	3.30	2.71	2.97	2.88	2.85	2.87	2.36[e]

[a] U.S. Bureau of the Census, Census of Population: 1970, Vol. I, *Characteristics of the Population*, Part 1, United States Summary-Section 2, Table 209, pp. 1-66.

[b] This category for the entire U.S. includes heads of families who have anything less than an eighth grade education.

[c] *Characteristics of the Population*, Table 259, pp. 1-962.

[d] Published census data were not available on the disability of heads of families. These figures are based on data for all persons between 16 and 64 years old (excluding inmates of institutions and persons attending school; and reflect the percent who are disabled but still can work. U.S. Bureau of the Census, Census of Population: 1970, *General Social and Economic Characteristics*, Final Report, PC (1)-C1, United States Summary, Table 88, pp. 1-388.

[e] U.S. Bureau of the Census, Census of Population: 1970, *General Social and Economic Characteristics*, Table 95, pp. 1-398.

[f] This category includes all family heads between 15 and 19 years of age. Percents are based on 30,589,893 family heads between the ages of 15 and 49. U.S. Bureau of the Census, Census of Population: 1970, *Detailed Characteristics*, Final Report PC(1)-D1, United States Summary, Table 204, p. 849.

4.1.3 Education of Family Head

The EDRs differed substantially from each other in terms of the number of years of schooling completed by family heads, and these differences were most pronounced in the percentages of heads completing 8th grade or less and those completing more than 12th grade. The Pacific Northwest and Four Corners stood out as having the lowest percentages of family heads who had completed 8th grade or less (10.7% and 13.2% respectively), and having the highest percentages of those who had completed more than 12th grade (24.7% and 24.9% respectively). On the other hand, the Appalachian and Coastal-Plains regions had 25.1% and 24.3%, respectively, of eligible family heads who had completed 8th grade or less, and about 8.8% who had completed more than 12th grade.

4.1.4 Sex of Family Head

Among all eligible families, 20.9% had female[24] heads. Old West had the lowest percentage (15.2%) of female heads, while the highest percentages were in New England with 26%, the Pacific Northest with 24.8%, and Coastal-Plains with 23.2%.

4.1.5 Disability Limiting Work

Among the total national population between the ages of 16 and 64, 6.9% had a disability that limited the kind or amount of work they could do. Among the heads of all eligible families the figure was 8.7%. Among the EDRs the percentages of family heads with a disability limiting work were all quite similar (7.5% to 9.5%), with one exception: in the Pacific Northwest 13% of eligible family heads had a work-limiting disability.

4.1.6 Family Size and Children Under 18

The average number of persons per family in the United States in 1970 was 3.56, and among all eligible families it was 4.84. Among the

[24] Because of Census procedures female heads of families are by definition heads of single-parent families. See Documentation, Concept 80, pages 148-149.

eight EDRs the Pacific Northwest had the smallest average family size (4.67 persons per family), and the Upper Great Lakes region had the largest with 5.25 persons per family. The Upper Great Lakes also had the largest average number of related children under age 18, with 3.3 per family. The lowest average number of related children per family was in the Ozarks (with 2.71), as compared to an average of 2.87 for all eligible families and 2.36 for all families in the nation.

4.2 Housing Conditions and Cost for Eligible Families by Economic Development Regions

In this section we provide a description, for each of the Economic Development Regions, of the housing conditions in which the eligible population lived and how much it cost. The following discussion of housing conditions and costs is based on Table 4.2-1 on the folloiwng page.

4.2.1 Housing Costs

The data on housing costs presented in Table 4.2-1 are based on only those families and housing units that are in the rent universe[25]. Gross monthly rent refers to monthly contract rent plus the average monthly cost of utilities, whether included in the rent or paid for spearately by the tenant.[26] Table 4.2-1 indicates that the average gross monthly rent for all rental housing units in the nation was $110.00 per month during 1969, whereas the average for all eligible families was about $87.00 per month, some $23.00 per month less than the national average. Among the EDRs there was a substantial variation in the average gross rent paid by eligible families. The Ozarks, Appalachian and Coastal-Plains regions paid least, with an average gross rent of about $75.00 per month. On the high side New England, Pacific Northwest and the Upper Great Lakes rents averaged over $100.00 per month, with New England highest at $112.00. These differences in housing costs may simply reflect differential costs of living among the eight regions or they may be due to other unidentified factors.

---

[25] See footnote 'a' to Table 4.2-1.

[26] See Documentation, Concept 167, pages 166-167.

Table 4.2-1

Housing Conditions and Costs for Eligible Families of 8 Economic Development Regions, for All Eligible Families, and for All Families in the United States

CHARACTERISTICS	ECONOMIC DEVELOPMENT REGIONS								All Eligible Families (2 283 500 Families)	All Families in U.S. (51 168 569 Families)
	Pacific Northwest (82 200 Families)	Old West (104 600 Families)	Four Corners (91 700 Families)	Upper Great Lakes (157 800 Families)	Ozarks (293 700 Families)	New England (97 700 Families)	Appalachian (531 300 Families)	Coastal Plains (432 500 Families)		
1. Average Gross Monthly Rent	$104.96[a] (n = 34 200)	$ 94.12[a] (n = 32 100)	$ 94.99[a] (n = 36 200)	$106.28[a] (n = 36 900)	$ 75.35[a] (n = 102 500)	$112.77[a] (n = 34 400)	$ 74.31[a] (n = 183 600)	$77.24[a] (n = 160 600)	$ 87.26[a] (n = 807 600)	$110[b]
2. Gross Rent as Percent of Total Family Income for Families in the Rent Universe	(n = 32 000)	(n = 31 200)	(n = 34 000)	(n = 35 600)	(n = 98 900)	(n = 31 800)	(n = 177 100)	(n = 155 700)	(n = 773 500)	
a) Less than 20%	3 600 (11.2%)	5 800 (18.7%)	5 800 (17.1%)	4 800 (13.4%)	30 000 (30.3%)	4 200 (13.1%)	65 300 (36.9%)	57 400 (36.9%)	210 900 (27.2%)	7 852 134[i] (56.2%)
b) 20 - 24%	4 400 (13.8%)	4 400 (14.1%)	4 000 (11.8%)	5 100 (14.3%)	16 400 (16.6%)	4 200 (13.2%)	25 600 (14.5%)	23 500 (15.1%)	111 000 (14.4%)	1 889 218 (13.6%)
c) 25 - 34%	6 600 (20.6%)	7 500 (24.0%)	8 200 (24.1%)	7 300 (20.5%)	21 200 (21.4%)	8 700 (27.4%)	31 100 (17.6%)	29 900 (19.2%)	156 900 (20.3%)	1 845 679 (13.3%)
d) 35% or more	17 400 (54.4%)	13 500 (43.3%)	16 000 (47.1%)	18 400 (51.7%)	31 300 (31.6%)	14 700 (46.2%)	55 100 (31.1%)	44 900 (28.8%)	294 700 (38.1%)	2 308 546 (16.6%)
3. Average Total Number of Persons Living in Housing Unit	4.71	4.83	4.81	5.27	4.72	4.88	4.90	4.89	4.87	3.11[c]
4. Number Persons per Room										
a) .50 or less	10 700 (13.0%)	13 400 (12.8%)	9 900 (10.8%)	21 100 (13.4%)	37 500 (12.8%)	9 900 (11.3%)	67 300 (12.7%)	52 900 (12.2%)	288 100 (12.7%)	31 729 805[d] (50%)
b) .51 - .75	20 000 (24.3%)	27 000 (25.8%)	18 800 (20.5%)	34 500 (21.9%)	61 300 (20.9%)	23 400 (26.7%)	108 000 (20.3%)	82 800 (19.1%)	486 700 (21.5%)	14 416 343 (22.7%)
c) .76 - 1.00	28 400 (34.5%)	37 000 (35.4%)	30 300 (33.0%)	55 200 (35.0%)	98 800 (33.6%)	31 200 (35.6%)	177 500 (33.4%)	139 500 (32.3%)	757 400 (33.5%)	12 238 575 (19.3%)
d) 1.01 - 1.50	18 200 (22.1%)	19 700 (18.8%)	21 200 (23.1%)	36 700 (23.3%)	66 300 (22.6%)	19 000 (21.7%)	123 400 (23.2%)	105 800 (24.5%)	513 800 (22.7%)	3 781 905 (6.0%)
e) 1.51 - 2.00	4 000 (4.9%)	5 500 (5.3%)	7 300 (8.0%)	8 500 (5.4%)	22 400 (7.6%)	3 300 (3.8%)	39 600 (7.5%)	37 300 (8.6%)	158 900 (7.0%)	1 278 563 (2.0%)
f) More than 2.00	900 (1.1%)	2 000 (1.9%)	4 200 (4.6%)	1 800 (1.1%)	7 400 (2.5%)	900 (1.0%)	15 500 (2.9%)	14 200 (3.3%)	58 600 (2.6%)	
5. Number and Percent of Families Without Complete Private Kitchen Facilities	700 (0.9%)	4 300 (4.1%)	5 000 (5.5%)	5 600 (3.5%)	31 100 (10.6%)	2 400 (2.7%)	83 100 (15.6%)	73 500 (17.0%)	233 000 (10.3%)	2 972 118[e] (4.4%)

(continued)

Table 4.2.1

Housing Conditions and Costs for Eligible Families of 8 Economic Development Regions, for All Eligible Families, and for All Families in the United States

CHARACTERISTICS	ECONOMIC DEVELOPMENT REGIONS								All Eligible Families (2 263 500 Families)	All Families in U.S. (51 168 599 Families)
	Pacific Northwest (82 200 Families)	Old West (104 600 Families)	Four Corners (91 700 Families)	Upper Great Lakes (157 800 Families)	Ozarks (293 700 Families)	New England (87 700 Families)	Appalachian (531 300 Families)	Coastal Plains (432 500 Families)		
6. Number and Percent of Families With NO Piped Hot Water	1 000 (1.2%)	5 200 (5.0%)	6 600 (7.2%)	8 400 (5.3%)	42 500 (14.5%)	4 600 (5.2%)	114 600 (21.6%)	105 300 (24.3%)	327 900 (14.5%)	3 109 013[e] (4.6%)
7. Number and Percent of Families With NO Flush Toilet, or NO Private Flush Toilet	1 500 (1.8%)	5 500 (5.3%)	6 700 (7.3%)	7 700 (4.9%)	38 800 (13.2%)	3 300 (3.8%)	116 300 (21.9%)	94 100 (21.8%)	312 800 (13.8%)	3 217 601[e] (4.8%)
8. Number and Percent of Families With NO Bathtub or Shower, or NO Private Bathtub or Shower	1 400 (1.7%)	5 700 (5.4%)	7 000 (7.6%)	9 500 (6.0%)	41 000 (14.0%)	4 300 (4.9%)	120 600 (22.7%)	103 000 (23.8%)	332 200 (14.7%)	3 660 174[e] (5.4%)
9. Number and Percent of Families With NO Telephone Available	21 800 (26.5%)	19 700 (18.8%)	32 400 (35.3%)	23 500 (14.9%)	100 800 (34.3%)	17 100 (19.5%)	204 000 (38.4%)	189 100 (43.7%)	749 300 (33.1%)	8 033 628[f] (12.7%)
10. Number and Percent of Families With NO Dishwasher	65 300 (79.4%)	91 300 (87.3%)	79 600 (86.8%)	139 300 (88.3%)	272 600 (92.8%)	77 300 (88.1%)	499 800 (94.1%)	412 500 (95.4%)	2 071 900 (91.5%)	51 482 456[g] (81.1%)
11. Number and Percent of Families With NO T.V.	6 100 (7.4%)	5 500 (5.3%)	7 700 (8.4%)	5 000 (3.2%)	16 000 (5.4%)	3 100 (3.5%)	33 500 (6.3%)	26 200 (6.1%)	130 900 (5.8%)	2 852 814[g] (4.5%)
12. Number and Percent of Families That Can NOT Receive UHF T.V. Signals[h]	5[illegible] 000 (6[illegible] .2%)	73 200 (70.0%)	61 000 (66.5%)	91 700 (58.1%)	208 200 (70.8%)	53 100 (60.5%)	331 200 (62.3%)	299 400 (69.3%)	1 440 300 (63.6%)	30 636 605[g] (48.3%)
13. Number and Percent of Families With NO Battery Operated Radio	19 000 (23.1%)	20 600 (19.7%)	26 200 (28.6%)	36 800 (23.3%)	104 700 (35.6%)	22 600 (25.8%)	205 400 (38.7%)	178 400 (41.2%)	753 800 (33.3%)	17 338 929[g] (27.3%)

[a]The average gross monthly rent is based on those families in the rent universe. Excluded are those families who own their housing unit, rent without cash rent, or live in one-family houses on places of 10 acres or more. The number of families used in estimating the average for each region and for all eligible families is shown on the table.

[b]Based on 54,158,018 housing units. U.S. Bureau of the Census, Census of Population: 1970, *General Social and Economic Characteristics*, Final Report, PC(1)-CL, United States Summary, Table 95, pp. 1-400.

[c]Based on 63,449,747 households. U.S. Bureau of the Census, Census of Population: 1970, *General Population Characteristics*, Final Report, PC(1)-B1, United States Summary, Table 54, pp. 1-278.

[d]Based on 63,445,192 occupied housing units. U.S. Bureau of the Census, Census of Housing: 1970, *Detailed Housing Characteristics*, Final Report, HC(1)-B1, United States Summary, Table 30, pp. 1-262.

[e]Based on 67,899,084 year-round housing units. *Detailed Housing Characteristics*, Table 29, pp. 1-260.

[f]Based on 63,445,192 occupied housing units. *Detailed Housing Characteristics*, Table 29, pp. 1-260.

[g]Based on 63,446,841 housing units. *Detailed Housing Characteristics*, Table 24, pp. 1-254.

[h]This includes families with no TV sets as well as families that have TV sets that are not equipped to receive UHF signals.

[i]Computed on the basis of 13,895,577 rental units occupied by families, from data presented in U.S. Bureau of the Census, Census of Population: 1970, *Subject Reports, Final Report* PC(2)-9A, *Low Income Population*, Table 36, p. 410.

When we computed gross rent as a percent of total family income for those families in the rent universe, there were some rather dramatic differences among the eight regions in terms of the percentages of families paying more than 25%, and more than 35%, of their total family income for rent. These percentage differences correspond very closely to the differences in the dollar amounts paid for rent. In the Pacific Northwest, Four Corners, Upper Great Lakes and New England over 70% of eligible families in the rent universe paid 25% or more of their total family income for rent. Old West was not far behind, with 71% of its eligible families paying that much for rent. The Ozarks region followed at 53% and the Coastal-Plains and Appalachian regions were at 48% and 49%, respectively. Among the entire national population of families in the rent universe only 30% paid 25% or more of their total family income for rent. This was 45% lower than for eligible families in the Pacific Northwest (the highest EDR) and 18% lower than among eligible families in Coastal-Plains (the lowest EDR).

4.2.2 Adequacy of Housing Units

In the United States in 1970 there was an average of 3.11 persons living in each housing unit. Among the population of eligible families there was an average of 4.87 persons living in each housing unit. Among the EDRs this number is quite consistent, with the exception of the Upper Great Lakes region, which had an average of 5.27 persons per housing unit. These figures translate directly into more crowded housing conditions for eligible families than for the rest of the nation, as noted in Chapter Three, although there was little difference among the regions in terms of the average number of persons per room in the dwelling units of eligible families.

When we considered the absence of basic facilities in the housing units of eligible families, however, we did find distinct differences among the regions. A substantially higher percentage of housing units were without complete kitchen facilities, hot water, flush toilets and bathtubs/showers in the Ozarks, Appalachian and Coastal-Plains regions than in the other EDRs. The Pacific Northwest consistently had the lowest percentage of housing units missing these basic features.

When we turned to the less essential household equipment such as telephones, dishwashers and television sets, regional differences, while still present were not as consistent. It is interesting that the Ozarks, Appalachian and Coastal-Plains regions, however, had substantially higher percentages of eligible families who did not have a battery-operated radio in their homes.

4.3 Employment Characteristics of Heads of Eligible Families by Economic Development Regions

The preceding sections provided comparisons among the EDRs of the basic demographic characteristics and housing conditions and costs for the eligible population of families. We now turn to a comparison across regions of the employment characteristics of heads of eligible families at the time the 1970 Census was conducted. The following discussion is based on Table 4.3-1 on the following page.

4.3.1 Employment Status of Family Head

At the time the 1970 Census was conducted 80% of the heads of all families in the United States were classified as employed, 2.1% were unemployed, and 17.9% were classified as not in the labor force. Among all eligible families 83.3% of family heads were employed (3.3% higher than in the nation), 4.1% were unemployed (2% higher than in the nation), and 12.6% (5.3% lower than the national rate) were classified as not in the labor force. In terms of employment status in 1969 the heads of all eligible families as a group did not appear to have been drastically different from the heads of all families in the nation, although a slightly higher percentage were employed, unemployed and in the labor force.

When employment status was broken down by regions, however, substantial variations became apparent. The Old West region had the highest percent of heads of eligible families employed (88.2%) and the Pacific Northwest had the lowest with only 76% employed. The Pacific Northwest and Four Corners had the highest percentages of heads of eligible families not in the labor force (about 17%, which was comparable

Table 4.3-1

Employment Characteristics of Heads of Eligible Families in 8 Economic Development Regions, for All Eligible Families, and for Heads of All Families in the United States

CHARACTERISTICS	ECONOMIC DEVELOPMENT REGIONS								All Eligible Families (2 263 500 Families)	All Families in U.S. (51 168 599 Families)
	Pacific Northwest (82 200 Families)	Old West (184 600 Families)	Four Corners (91 700 Families)	Upper Great Lakes (157 800 Families)	Ozarks (293 700 Families)	New England (87 700 Families)	Appalachian (531 300 Families)	Coastal Plains (432 500 Families)		
1. Employment Status										
a) Employed	62 500 (76.0%)	92 300 (88.2%)	73 300 (79.9%)	133 700 (84.7%)	241 800 (82.3%)	70 600 (80.5%)	436 800 (82.2%)	373 000 (86.2%)	1 885 100 (83.3%)	40 910 885[a] (80.0%)
b) Not Employed	5 600 (6.8%)	3 100 (3.0%)	3 500 (3.8%)	7 700 (4.9%)	13 700 (4.7%)	3 400 (3.9%)	23 100 (4.3%)	11 400 (2.6%)	93 200 (4.1%)	1 097 634 (2.1%)
c) Not in Labor Force	14 100 (17.2%)	9 200 (8.8%)	14 900 (16.2%)	16 400 (10.4%)	38 200 (13.0%)	13 700 (15.6%)	71 400 (13.4%)	48 100 (11.1%)	285 200 (12.6%)	9 160 080 (17.9%)
2. Number of Weeks Worked in Last Year										
a) No Work Last Year	9 100 (11.1%)	6 200 (5.9%)	11 400 (12.4%)	13 000 (8.2%)	29 500 (10.0%)	10 300 (11.7%)	57 000 (10.7%)	35 600 (8.2%)	220 700 (9.8%)	7 276 281[a,b] (14.4%)
b) 13 Weeks or Less	7 100 (8.6%)	5 300 (5.1%)	4 800 (5.2%)	8 100 (5.1%)	15 100 (5.1%)	4 700 (5.4%)	25 600 (4.8%)	18 800 (4.3%)	116 700 (5.2%)	2 650 738 (5.3%)
c) 14 - 26	8 600 (10.5%)	4 500 (4.3%)	7 300 (8.0%)	8 300 (5.3%)	13 700 (4 7%)	6 300 (7.2%)	30 000 (5.6%)	21 600 (5.0%)	129 900 (5.7%)	
d) 27 - 39	8 000 (9.7%)	6 000 (5.7%)	7 100 (7.7%)	11 800 (7.5%)	22 200 (7.6%)	7 500 (8.6%)	46 100 (8.7%)	31 800 (7.4%)	179 700 (7.9%)	2 086 380 (4.1%)
e) 40 - 47	6 100 (7.4%)	5 600 (5.4%)	5 700 (6.2%)	10 700 (6.8%)	25 700 (8.8%)	5 800 (6.6%)	48 400 (9.1%)	35 500 (8.2%)	180 700 (8.0%)	5 766 831 (11.5%)
f) 48 - 49	4 600 (5.6%)	3 500 (3.3%)	5 600 (6.1%)	7 000 (4.4%)	16 000 (5.4%)	3 800 (4.3%)	30 900 (5.8%)	30 500 (7.1%)	125 100 (5.5%)	
g) 50 - 52	38 700 (47.1%)	73 500 (70.3%)	49 800 (54.3%)	98 900 (62.7%)	171 500 (58.4%)	49 300 (56.2%)	293 300 (55.2%)	258 700 (59.8%)	1 310 700 (57.9%)	32 579 275 (64.7%)
3. Number and Percent of Employed Heads of Families Who Worked and Did Not Work During the Reference Week	(n = 72 400)	(n = 98 400)	(n = 80 300)	(n = 144 800)	(n = 264 200)	(n = 77 400)	(n = 474 300)	(n = 396 900)	(n = 2 042 800)	(n = 28 600 800)
a) Worked	56 400 (80.7%)	87 200 (88.6%)	67 800 (84.4%)	127 300 (87.9%)	228 700 (86.6%)	64 600 (83.5%)	420 100 (88.6%)	348 000 (87.7%)	1 775 900 (86.9%)	27 992 404 (97.7%)
b) Not at Work During Reference Week	14 000 (19.3%)	11 200 (11.4%)	12 500 (15.6%)	17 500 (12.1%)	35 500 (13.4%)	12 800 (16.5%)	54 200 (11.4%)	48 900 (12.3%)	266 900 (13.1%)	668 396 (2.3%)

(continued)

Table 4.3-1

Employment Characteristics of Heads of Eligible Families in 8 Economic Development Regions, for All Eligible Families, and for Heads of All Families in the United States

CHARACTERISTICS	ECONOMIC DEVELOPMENT REGIONS								All Eligible Families (2 283 500 Families)	All Families in U.S. (51 168 599 Families)
	Pacific Northwest (82 200 Families)	Old West (104 600 Families)	Four Corners (91 700 Families)	Upper Great Lakes (157 900 Families)	Ozarks (293 700 Families)	New England (87 700 Families)	Appalachian (531 300 Families)	Coastal Plains (432 500 Families)		
4. Number and Percent of Employed Family Heads at Work During the Reference Week										
a) 1 - 34 Hours	8 600 (14.7%)	9 800 (11.2%)	8 800 (13.0%)	16 700 (13.1%)	31 900 (14.0%)	9 200 (14.3%)	60 800 (14.5%)	50 500 (14.5%)	245 900 (13.8%)	2 465 146 (8.8%)
b) 35 - 40 Hours	23 100 (39.6%)	20 800 (23.9%)	28 200 (41.6%)	43 400 (34.1%)	93 800 (41.0%)	26 400 (40.9%)	206 900 (49.2%)	171 700 (49.3%)	768 300 (43.3%)	13 860 698 (49.5%)
c) 41 - 48 Hours	7 700 (13.2%)	12 200 (14.0%)	10 600 (15.6%)	17 000 (13.4%)	40 000 (17.5%)	13 000 (20.1%)	63 000 (15.0%)	57 700 (16.6%)	279 800 (15.8%)	5 433 575 (19.4%)
d) 49 - 59 Hours	6 400 (10.9%)	10 800 (12.4%)	8 300 (12.2%)	14 800 (11.6%)	22 700 (9.9%)	7 000 (10.8%)	38 200 (9.1%)	34 500 (9.9%)	182 800 (10.3%)	3 277 915 (11.7%)
e) 60 Hours or More	12 600 (21.6%)	33 600 (38.5%)	11 900 (17.6%)	35 400 (27.8%)	40 300 (17.6%)	9 000 (13.9%)	51 200 (12.2%)	33 600 (9.7%)	299 100 (16.8%)	2 955 070 (10.6%)
5. Class of Worker										
a) Private Co. Employee, etc.	53 600 (66.2%)	52 600 (50.3%)	52 900 (57.7%)	94 800 (60.1%)	190 200 (64.8%)	60 900 (69.4%)	379 300 (71.4%)	310 000 (71.7%)	1 510 300 (66.7%)	31 857 243 (62.3%)
b) Fed. Government	5 500 (6.7%)	7 500 (7.2%)	9 900 (10.8%)	6 900 (4.4%)	17 100 (5.8%)	6 400 (7.3%)	20 700 (3.9%)	29 200 (6.8%)	136 500 (6.0%)	2 126 347 (4.2%)
c) State Government	2 700 (3.3%)	2 800 (2.7%)	5 200 (5.7%)	3 800 (2.4%)	9 000 (3.1%)	1 900 (2.2%)	17 600 (3.3%)	13 000 (3.0%)	71 000 (3.1%)	1 439 332 (2.8%)
d) Local Government	3 100 (3.8%)	3 800 (3.6%)	6 300 (6.9%)	5 700 (3.6%)	12 600 (4.3%)	3 800 (4.3%)	19 500 (3.7%)	15 700 (3.6%)	93 400 (4.1%)	2 777 922 (5.4%)
e) Self Employed	14 300 (17.4%)	35 200 (33.7%)	11 900 (13.0%)	42 100 (26.7%)	50 000 (17.0%)	10 700 (12.2%)	65 400 (12.3%)	48 600 (11.2%)	354 200 (15.6%)	4 800 991 (9.4%)
f) Working Without Pay	300 (0.4%)	200 (0.2%)	100 (0.1%)	400 (0.3%)	1 200 (0.4%)	200 (0.2%)	1 300 (0.2%)	1 300 (0.3%)	6 700 (0.3%)	67 275 (0.1%)
g) NA, etc.[9]	2 700 (3.3%)	2 500 (2.4%)	5 400 (5.9%)	4 100 (2.6%)	13 600 (4.6%)	3 800 (4.3%)	27 500 (5.2%)	14 700 (3.4%)	91 400 (4.0%)	8 099 489 (15.8%)

(continued)

Table 4.3-1
Employment Characteristics of Heads of Eligible Families in 8 Economic Development Regions, for All Eligible Families, and for Heads of All Families in the United States

CHARACTERISTICS	ECONOMIC DEVELOPMENT REGIONS								All Eligible Families (2 263 600 Families)	All Families in U.S. (51 188 593 Families)
	Pacific Northwest (82 200 Families)	Old West (104 600 Families)	Four Corners (91 700 Families)	Upper Great Lakes (157 900 Families)	Ozarks (293 700 Families)	New England (87 700 Families)	Appalachian (531 300 Families)	Coastal Plains (432 900 Families)		
6. Type of Occupation										
a) Professional & Tech.	5 100 (6.2%)	4 800 (4.6%)	8 100 (8.8%)	8 600 (5.4%)	13 900 (4.7%)	6 400 (7.3%)	23 600 (4.4%)	16 600 (3.8%)	113 900 (5.0%)	5 968 306[c] (11.7%)
b) Managers & Adm.	5 100 (6.2%)	5 300 (5.1%)	6 000 (6.5%)	8 300 (5.3%)	15 600 (5.3%)	4 700 (5.4%)	20 900 (3.9%)	18 400 (4.3%)	104 900 (4.6%)	4 973 564 (9.7%)
c) Sales Workers	2 300 (2.8%)	4 300 (4.1%)	3 200 (3.5%)	5 800 (3.7%)	10 200 (3.5%)	3 700 (4.2%)	16 800 (3.2%)	13 400 (3.1%)	77 200 (3.4%)	2 831 394 (5.5%)
d) Clerical	6 200 (7.5%)	4 800 (4.6%)	6 300 (6.9%)	8 000 (5.1%)	14 000 (4.8%)	6 700 (7.6%)	27 600 (5.2%)	20 400 (4.7%)	125 200 (5.5%)	3 517 227 (6.9%)
e) Craftsmen	10 300 (12.5%)	14 400 (13.8%)	12 500 (13.6%)	25 600 (16.2%)	52 500 (17.9%)	17 700 (20.2%)	100 400 (18.9%)	76 800 (17.8%)	385 200 (17.0%)	8 937 824 (17.5%)
f) Operatives (not transp)	11 200 (13.6%)	10 000 (9.6%)	11 000 (12.0%)	27 100 (17.2%)	48 600 (16.5%)	13 900 (15.8%)	109 700 (20.6%)	88 800 (20.5%)	395 100 (17.5%)	5 546 251 (10.8%)
g) Transport Operatives	4 900 (6.0%)	4 400 (4.2%)	5 300 (5.8%)	8 900 (5.6%)	21 000 (7.2%)	6 600 (7.5%)	45 100 (8.5%)	30 700 (7.1%)	159 100 (7.0%)	2 351 028 (4.6%)
h) Non-farm Labor	9 400 (11.4%)	5 500 (5.3%)	5 900 (6.4%)	10 900 (6.9%)	23 100 (7.9%)	5 700 (6.5%)	47 700 (9.0%)	39 100 (9.0%)	184 200 (8.1%)	2 031 079 (4.0%)
i) Farmers/Farm Managers	6 200 (7.5%)	27 100 (25.9%)	5 700 (6.2%)	27 600 (17.5%)	25 100 (8.5%)	2 700 (3.1%)	28 100 (5.3%)	16 500 (3.8%)	181 000 (8.0%)	1 204 643 (2.4%)
j) Farm Laborers	5 600 (6.8%)	6 100 (5.8%)	5 100 (5.6%)	4 000 (2.5%)	13 600 (4.6%)	2 600 (3.0%)	19 100 (3.6%)	28 500 (6.6%)	112 900 (5.0%)	485 796 (0.9%)
K)Service Workers – NP	9 300 (11.3%)	10 600 (10.1%)	12 400 (13.5%)	14 200 (9.0%)	25 700 (8.8%)	8 600 (9.8%)	45 100 (8.5%)	36 700 (8.5%)	216 300 (9.6%)	3 122 464 (6.1%)
l) Priv. Household Serv.	400 (0.5%)	600 (0.6%)	600 (0.7%)	1 200 (0.8%)	6 900 (2.3%)	500 (0.6%)	10 700 (2.0%)	12 700 (2.9%)	38 400 (1.7%)	201 633 (0.4%)
m)NA etc.[f]	6 200 (7.5%)	6 700 (6.4%)	9 600 (10.5%)	7 600 (4.8%)	23 500 (8.0%)	7 900 (9.0%)	36 500 (6.9%)	33 900 (7.8%)	170 100 (7.5%)	9 997 390 (19.5%)

(continued)

Table 4.3-1
Employment Characteristics of Heads of Eligible Families in 8 Economic Development Regions, for All Eligible Families, and for Heads of All Families in the United States

CHARACTERISTICS	ECONOMIC DEVELOPMENT REGIONS								All Eligible Families (2 263 500 Families)	All Families in U.S. (51 188 599 Families)
	Pacific Northwest (82 200 Families)	Old West (104 600 Families)	Four Corners (91 700 Families)	Upper Great Lakes (157 800 Families)	Ozarks (293 700 Families)	New England (87 700 Families)	Appalachian (531 300 Families)	Coastal Plains (432 500 Families)		
8. Type of Industry										
a) Agriculture, Forestry, Fisheries	13 500 (16.4%)	34 700 (33.2%)	11 900 (13.0%)	32 700 (20.7%)	42 200 (14.4%)	7 300 (8.3%)	52 800 (9.9%)	52 800 (12.2%)	325 400 (14.4%)	1 988 141[d] (3.9%)
b) Mining	300 (.4%)	2 600 (2.5%)	3 000 (3.3%)	1 500 (1.0%)	7 900 (2.7%)	500 (0.6%)	16 600 (3.1%)	5 100 (1.2%)	45 600 (2.0%)	530 714 (1.0%)
c) Construction	5 800 (7.1%)	6 200 (5.9%)	8 900 (9.7%)	13 400 (8.5%)	34 900 (11.9%)	10 000 (11.4%)	54 300 (10.2%)	50 300 (11.6%)	229 300 (10.1%)	3 830 687 (7.5%)
d) Manufacturing	17 200 (20.9%)	9 900 (9.5%)	10 500 (11.6%)	42 400 (26.9%)	63 800 (21.7%)	23 800 (27.1%)	166 000 (31.2%)	125 400 (29.0%)	560 500 (24.8%)	12 558 643 (24.5%)
e) Transportation Communications Other Utilities	4 600 (5.6%)	5 100 (4.9%)	4 100 (4.5%)	7 600 (4.8%)	16 400 (5.6%)	4 000 (4.6%)	31 100 (5.9%)	22 000 (5.1%)	122 700 (5.4%)	3 539 421 (6.9%)
f) Wholesales & Retail Trade	17 400 (21.2%)	21 900 (20.9%)	15 600 (17.0%)	23 500 (14.9%)	48 800 (16.6%)	15 800 (18.0%)	81 700 (15.4%)	60 000 (13.9%)	366 400 (16.2%)	7 069 978 (13.8%)
g) Finance, Insurance, Real Estate	1 400 (1.7%)	1 200 (1.1%)	2 100 (2.3%)	1 600 (1.0%)	3 700 (1.3%)	1 400 (1.6%)	6 200 (1.2%)	4 700 (1.1%)	30 200 (1.3%)	1 762 059 (3.4%)
h) Business and Repair Services	2 900 (3.5%)	2 600 (2.5%)	2 200 (2.4%)	3 800 (2.4%)	8 100 (2.8%)	1 600 (1.8%)	14 600 (2.7%)	11 300 (2.6%)	59 400 (2.6%)	1 400 380 (2.7%)
i) Personal Services	2 900 (3.5%)	3 000 (2.9%)	4 600 (5.0%)	4 900 (3.1%)	13 200 (4.5%)	3 100 (3.5%)	20 600 (3.9%)	22 300 (5.2%)	92 100 (4.1%)	1 055 214 (2.1%)
j) Entertainment Recreation	600 (0.7%)	500 (0.5%)	800 (0.9%)	300 (0.2%)	1 000 (0.3%)	700 (0.8%)	2 100 (0.4%)	3 300 (0.8%)	13 400 (0.6%)	271 787 (0.5%)
k) Professional and Related Services	6 800 (8.3%)	7 500 (7.2%)	12 400 (13.5%)	13 800 (8.7%)	21 300 (7.3%)	8 800 (10.0%)	35 600 (6.7%)	30 400 (7.0%)	181 700 (8.0%)	4 491 135 (8.8%)
l) Public Administration	2 600 (3.2%)	2 700 (2.6%)	6 000 (6.5%)	4 700 (3.0%)	8 900 (3.0%)	2 800 (3.2%)	13 200 (2.5%)	11 000 (2.5%)	66 700 (2.9%)	2 673 050 (5.2%)
m)NA, etc.	6 200 (7.5%)	6 700 (6.4%)	9 600 (10.5%)	7 600 (4.8%)	23 500 (8.0%)	7 900 (9.0%)	36 500 (6.9%)	33 900 (7.8%)	170 100 (7.5%)	9 997 360 (19.5%)

[a]U.S. Bureau of the Census, Census of Population: 1970, Vol. I, *Characteristics of the Population*, Part 1, United States Summary – Section 2, Table 262, pp. 1-998.

[b]These figures are based on 50,358,505 family heads in the civilian labor force. Comparable figures could not be found for heads of families in the Armed Forces.

[c]*Characteristics of the Population*, Table 255, pp. 1-942.

[d]*Characteristics of the Population*, Table 258, pp. 1-951.

[e]NA refers to person who never worked or persons not in the labor force who either did not report the year they last worked or who last worked in 1959 or earlier. See *Documentation*, Concept 97, page 154, and variable P31, page 74.

[f]See footnote 'a' above and *Documentation*, Concept 95, pages 152-153.

to the nation as a whole), while Old West had the lowest percentage (8.8%) not in the labor force.

Examining the percentage distributions of number of weeks worked by eligible family heads during 1969 we found that the regions were for the most part quite similar. The Pacific Northwest, however, had a substantially lower percentage of eligible family heads who worked 50-52 weeks during 1969 than the other regions, and Old West had a substantially higher percentage than other regions with over 70% who had worked at least 50 weeks during 1969.

The distributions of number of hours worked during the 1970 Census reference week were also quite similar across the regions. New England had the lowest percentage of family heads working 40 hours or more during the reference week with 59.1% and the Pacific Northwest had the highest with 68.4%.

4.3.2 Type of Employment of Family Head

Among the heads of all eligible families 66.7% were employees of private companies. Across the EDRs only Old West with only 50.3% of heads of eligible families and Four Corners with 57.7% were substantially different from the percentage for all eligible families as a group. In the Old West region 33.7% of heads were classified as self-employed, while in the Four Corners region the difference was spread more evenly over self-employment and employment by the Federal, State and local governments. The Upper Great Lakes region also had a relatively high percentage (26.7%) of family heads classified as self-employed.

When we compare the type of occupation of heads of eligible families among the regions we find some differing percentage distributions. Four Corners and New England had the highest percentages of professional, technical and kindred workers with 8.8% and 7.3% respectively. The Pacific Northwest and Four Corners had the highest percentages of managers and administrators at 6.2% and 6.5% each. Sales workers, clericals and service workers not employed in private households were spread quite evenly across the regions. The regions were basically split into two groups in terms of their percentages of craftsmen. The Pacific

Northwest, Old West and Four Corners were low, with about 13%. The rest of the regions had closer to 18% of heads of eligigle families employed as craftsmen.

Old West ranked lowest in percentages of operatives -- 9.6% not in transportation and 4.2% in transportation, compared to the highs of 20.6% non-transport operatives and 8.5% transport operatives, both in the Appalachian EDR. Old West was highest in terms of farmers and farm managers (25.9%), followed by the Upper Great Lakes with 17.5%. New England ranked lowest with only 3.1% farmers and farm managers.

The EDRs may also be divided into two groups on the basis of percentages of eligible heads in private household service occupations. The Ozarks, Appalachian and Coastal-Plains regions respectively had 2.3%, 2.0% and 2.9% of eligible heads employed in Private household service occupations. The other five EDRs had between 0.5% and 0.8% of eligible family heads employed in this type of occupation.

In terms of the type of industry in which heads of eligible families were employed there were also distinct differences among the EDRs. Old West had the highest percentage (33.2%) employed in the agriculture, forestry and fisheries industry, with the Upper Great Lakes next at 20.7%. In all regions there was a substantially higher percentage of eligible heads employed in this type of industry than for heads of all families in the nation. Among all eligible heads 24.8% were employed in the manufacturing industry, and this percentage is quite similar across the regions with two exceptions: Old West and Four Corners were noticeably lower with 9.5% and 11.5% respectively. In the professional and related services industry there was also quite similar representation across regions (about 8%) with the exception of Four Corners, in which 13.5% of eligible heads were employed in this category.

There is little in the way of differences among the EDRs in the percentages of heads of eligible families employed in the public administration; entertainment and recreation; personal services; business and repair services; finance, insurance, and real estate; wholesale and retail trades; and transportation, communications and utilities industries.

4.4 Income Characteristics of Eligible Families by Economic Development Regions

In this section we compare the EDRs in terms of the income characteristics of eligible families and heads of eligible families during 1969, the reference year for the 1970 Census. The discussion is based on Table 4.4-1 on the following page.

4.4.1 Family Income

During 1969 the average total family income from all sources for all eligible families was $3,845. There was not a great deal of variation among the EDRs on this characteristic, with the lowest average family income being $3,648 in the Ozarks and the highest being $4,186 in the Upper Great Lakes region. This constituted a spread of $538 in average total annual family income which, although it is not a large figure in dollar amounts, was 15% of the average total family income in the Ozarks.

Average income per family member among all eligible families was $794 in 1969. Among the eight EDRs it ranged from a low of $774 per family member in the Old West to a high of $852 in New England, which was $43 per family member higher than in any other region.

4.4.2 Income of Family Head

Among all eligible families the average total income from all sources for family heads was $3,301 during 1969. Across the EDRs, this figure ranges from a low of $3,158 in the Ozarks to a high of $3,711 in the Upper Great Lakes. The heads' total income from all sources constituted between 86% and 89% of the total family income from all sources in each of the regions with the exception of Coastal-Plains, where it was 82% of the total family income.

When we consider only the earnings of family heads, as opposed to total income from all sources, the picture does not change greatly. Heads earnings as a percent of family income ranged from a low of 77% in the Pacific Northwest to a high of 82% in the Upper Great Lakes. In dollar amounts the earnings of heads ranged from a low of $2,907 in the Pacific Northwest to a high of $3,423 in the Upper Great Lakes and Old West.

Table 4.4-1

Income Characteristics of Eligible Families and Heads of Eligible Families in Each of 8 Economic Development Regions, for All Eligible Families, and for Heads of All Families in the United States

CHARACTERISTICS	ECONOMIC DEVELOPMENT REGIONS								All Eligible Families (2 263 500 Families)	All Families in U.S. (51 168 500 Families)
	Pacific Northwest (82 200 Families)	Old [illegible] (91 700 Families)	Four Corners (91 700 Families)	Upper Great Lakes (157 800 Families)	Ozarks (293 700 Families)	New England (87 700 Families)	Appalachian (531 300 Families)	Coastal Plains (432 500 Families)		
1. Average Total Family Income for 1969	$3,776	$3,733	$3,814	$4,186	$3,648	$4,122	$3,832	$3,883	$3,845	$10,999[a]
2. Average Income Per Family Member	$ 809	$ 774	$ 798	$ 797	$ 776	$ 852	$ 785	$ 799	$ 794	$ 3,092[a]
3. Average Total Income From all Sources for Heads in 1969	$3,252	$3,271	$3,267	$3,711	$3,158	$3,582	$3,310	$3,187	$3,301	$ 8,536[b]
4. Average, Head's Total Income from all Sources as Percent of Family's Total Income	86%	88%	86%	89%	87%	87%	86%	82%	86%	77%[b]
5. Average Total *Earnings* for Heads in 1969	$2,907	$3,054	$2,988	$3,423	$2,932	$3,271	$3,090	$3,010	$3,065	$ 4,363[c]
6. Average Head's Total *Earnings* as Percent of Family's Total Income	77%	82%	78%	82%	80%	79%	81%	78%	80%	69%[c]
7. Average Income for Heads from Social Security and Railroad Retirement	$ 43	$ 42	$ 50	$ 58	$ 57	$ 51	$ 65	$ 60	$ 55	NA[d]
8. Average Income for Heads from Public Assistance or Welfare	$ 143	$ 68	$ 86	$ 119	$ 74	$ 148	$ 79	$ 47	$ 87	NA[d]
9. Average Income for Heads from all Other Sources	$ 159	$ 107	$ 143	$ 111	$ 95	$ 112	$ 76	$ 70	$ 95	NA[d]

[a]U.S. Bureau of the Census, Census of Population: 1970, General Social and Economic Characteristics, Final Report, PC(1)-C1, United States Summary, Table 94, pp. 1-398.

[b]Computed from U.S. Bureau of the Census, Census of Population: 1970, *Detailed Characteristics*, Final Report, PC(1)-D1, United States Summary, Table 246, p. 844 and Table 250, p. 873.

[c]Computed from U.S. Bureau of the Census, Census of Population: 1970, *Subject Reports*, Final Report PC(2)-8A, Table 8, p. 341; and Final Report PC(2)-9A, Table 27, p. 280.

[d]These data are not available in published Census data in a form sufficiently comparable to be useful.

During 1969 the average income from Social Security and railroad retirement for heads of eligible families ranged from a low of $42 in the Old West to a high of $65 in the Appalachian ERD. These figures are for the entire year.

The amount of income heads of eligible families received from public assistance and welfare during 1969 varied among the EDRs, although the dollar amounts were all very small. New England, the Pacific Northwest and the Upper Great Lakes EDRs were highest, with $148, $143 and $119 respectively. All the other regions were substantially under $100, with the Coastal-Plains regions being lowest at $47.

The average income from all other sources for heads of all eligible families during 1969 was $95. Among the regions, average income from all other sources ranged from a low of $70 in the Coastal-Plains to a high of $159 in the Pacific Northwest. On this income characteristic the Ozarks, Appalachian and Coastal-Plains were each under $96, while all other EDRs were over $106.